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2	NOTICE OF PUBLIC HEARING CONCERNING THE
3	DRAFT UNDERGROUND INJECTION CONTROL (UIC) PERMIT
4	FOR THE LAHAINA WASTEWATER RECLAMATION FACILITY
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7	PUBLIC HEARING
8	NOVEMBER 6, 2008
9	6:15 P.M.
LO	LAHAINA CIVIC CENTER
L1	SOCIAL HALL MEETING AREA
L2	1840 HONOAPI'ILANI HIGHWAY
L3	LAHAINA, MAUI, HAWAII
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22	Reported by:
	Tonya McDade
23	Hawaii Certified Shorthand Reporter #447
	Registered Professional Reporter
24	Certified Realtime Reporter
	Certified Broadcast Captioner

1	ATTENDANCE
2	David Albright, Hearing Officer, Environmental
	Protection Agency
3	
	Nancy A. Rumrill, U.S. Environmental Protection Agency
4	
	Brett P. Moffatt, U.S. Environmental Protection Agency
5	
	Chauncey Hew, Environmental Management Division, State
6	Department of Health
7	Cheryl K. Okuma, Director, Department of Environmental
	Management
8	
	David Taylor, Division Chief Wastewater Reclamation,
9	County of Maui
10	PRESS:
	Akaku, Maui Community Television
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1	NOVEMBER 6, 2008
2	TRANSCRIPT OF PROCEEDINGS
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4	MR. DAVID ALBRIGHT: Microphone working? If
5	people could have a seat, we're going to try to get
6	started here, going to try to get started as close as
7	possible to the 6:15 time.
8	I guess, first, thank you for coming tonight.
9	My name is David Albright. And I am with the
10	Environmental Protection Agency, Region 9 office, in San
11	Francisco.
12	And this is a public hearing on the proposed
13	Underground Injection Control Permit for the Lahaina
14	Wastewater Reclamations Facility.
15	And I would like to talk a little bit about
16	what we're going to do tonight. And then we've asked
17	people to sign up on these forms if they want to give
18	oral testimony tonight. I know a number of you have
19	done that. If you haven't done that yet, and would like
20	to give oral comment, please fill out one of the green
21	forms.
22	This is a public hearing. The intent here is
23	to take comments from members of the public. You can
24	submit written comments, if you would like to do that,
25	or provide oral testimony as well.

1 We have quite a few people who have asked to 2 speak tonight. So we're going to try to keep people to 3 about five minutes, if that's okay. And, you know, we have a little bit of leeway on that, but we would like 5 to give everyone an opportunity, who has filled out a 6 form, to speak. So I would ask that you try to keep 7 your remarks to five minutes. 8 I would like to introduce some people who are 9 here with me. On the far right here is Nancy Rumrill, 10 she is an environmental engineer in the Groundwater 11 Office with U.S. EPA. And next to her is Brett Moffatt. 12 He is an attorney with the Office of Regional Counsel. 13 To my left here is Chauncey Hew, who is with the 14 Department of Health, the Underground Injection program. 15 The hearing is being -- we have a court 16 reporter. Her name is Tonya. And she is going to be 17 taking a complete transcript of the hearing. So what we're going to do first, before we get 18 19 into the specific comments from members who -- of the 20 public who have filled out these forms, is we're going 21 to have a brief presentation by the County of Maui. And 22 I would like to ask Cheryl Okuma, who is the Director of 23 the Department of Environmental Management with the

County, to come up. And she's going to say a few words

24

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to start it off.

- 1 MS. OKUMA: Thank you very much, Dave.
- Good evening, everyone. As mentioned, I'm
- 3 Cheryl Okuma, the Director of the Department of
- 4 Environmental Management for the County of Maui.
- 5 The County appreciates the opportunity to be
- 6 here this evening with a brief presentation by our
- 7 Wastewater Reclamation Division Chief, Dave Taylor. We
- 8 are aware of the concerns that have been raised by
- 9 members of the community. And be assured that we have
- 10 been and continue to be diligent in our efforts to meet
- 11 the regulatory requirements and standards of the U.S.
- 12 EPA as well as the State Department of Health.
- 13 I would like to turn this over to Dave Taylor,
- who will provide a background and some technical
- 15 information with respect to the Lahaina wastewater
- 16 facility and the injection wells.
- 17 Thank you.
- MR. TAYLOR: Thank you, Cheryl.
- 19 And I really appreciate all of you coming.
- What's really helpful to us, when people, who care so
- 21 much about the environment, come to these meetings, so
- that we can, you know, explain what we do, how we do it
- 23 and how we -- we serve the public in protecting the
- 24 environment.
- 25 One of the big misnomers about wastewater

- 1 utility management all across the country is that people
- think we're polluters. And it's important to remember
- 3 that we don't make pollution. The public makes
- 4 pollution. The public makes waste. And we treat that
- 5 waste. We work for you.
- 6 The treatment plants and the injection wells
- 7 are part of the treatment process. They are not
- 8 pollution. Human waste is pollution. And we try to
- 9 protect the environment from that -- from that waste
- 10 that we all generate. So, in general, the treatment
- 11 plant speeds up the natural methodology of waste
- treatment that happens in nature every day.
- 13 In nature, waste from animals is eaten by
- 14 microorganisms. They breathe air, they eat waste and
- 15 they breathe. And those microorganisms are eaten by
- 16 larger animals that eat -- and larger animals eat them.
- 17 So essentially what we do at the treatment
- plants is we breed microorganisms by giving lots of air.
- 19 And we turn the human waste into microorganisms that
- 20 eventually we separate from the water, we take the
- 21 microorganisms to a composting facility where it's mixed
- 22 with green waste. And that's all fully composted. 100
- 23 percent of the solid material generated on Maui from
- human waste is made into compost and sold as that eco
- compost material you guys see in the stores.

1 So in the Frequently Asked Questions that were 2 handed out -- there's more copies at the -- at the -- at 3 the front table -- we have a simplified process schematic of how the treatment plant works. And I'm not 5 going to go through every box, but, in general, what 6 happens, if you have this and follow along, the water 7 comes into our treatment plant, we screen out things 8 like -- like rags and other kinds of large things, like 9 sticks, and then we give the wastewater a lot of air. We -- we, basically, breed the microorganisms. And 10 11 while we're giving them air, we run them through 12 different -- through different environments of air where 13 we control their life cycle. And what we do is we -that takes the nitrogen, which is the big concern for 14 ocean environment, which is a solid material, and 15 16 through their life cycle turns it into gas and it goes 17 off into the environment. And the air, the atmosphere 18 is mostly nitrogen, anyway. So, basically, 60, 70 19 percent of the nitrogen that's in wastewater is transmitted -- is transferred to gas and goes off into 20 21 the atmosphere. 22 We keep -- we keep feeding the microorganisms air, they keep eating. And, eventually, they cling 23 together and they separate from the water. So we end up 24

with clean water that looks a lot like drinking water.

25

- 1 And these biosolids, which I already said go to
- 2 composting. So the water is then chlorinated. We run
- 3 it through another filtration process. And then it gets
- 4 to the point where we have to get rid of it. So we get
- 5 rid of our water in two ways.
- 6 Either we reuse it -- and reuse, from the
- 7 Lahaina treatment plant, about a million gallons day, or
- 8 about 20 percent of that water. And that's mostly used
- 9 at Kaanapali, on the golf courses and for greenways and
- 10 things like that. So that water that gets reused goes
- 11 through ultraviolet disinfection, which are ultraviolet
- lamps that sterilize any pathogens that are in that
- 13 water. And so about a million gallons of that water
- every day goes towards reuse.
- The other water, about four million gallons,
- 16 maybe a little less, goes down the injection wells. The
- injection well water is -- does not go through the
- 18 ultraviolet treatment. It goes down these deep pipes
- into the ground, they go down a couple hundred feet.
- 20 And that water moves outward through the ground,
- 21 eventually it comes out into the ocean.
- 22 The -- one of the big questions is why don't
- 23 we reuse more water. That's the big question everyone
- asks us.
- 25 It's important to know that although the water

- is really clean, we clean it to very high standards,
- 2 that water has to be distributed in a separate system
- from potable water. So to distribute reuse water, we
- 4 need a whole separate water system, pumps, tanks,
- 5 pipelines, et cetera. And that doesn't exist right now.
- 6 So that's what's really limiting our ability
- 7 to reuse water. And those systems are very expensive.
- 8 And they also take a lot of energy. So that's what's
- 9 holding us back from reusing more water.
- 10 And the question is, well, why don't we build
- 11 more?
- 12 The public here owns this wastewater system;
- not us. You're the owners of this system. And the
- 14 wastewater system on Maui is 100 percent funded from
- 15 your sewer bills. So, basically, we can build whatever
- the people want as long as the people are willing to pay
- 17 for it.
- 18 And when this has come up in Council again and
- 19 again, everyone always wants more reclaimed water. And
- 20 the difficulty is that nobody wants to pay a higher
- 21 sorbent. So that's really the dilemma we're in as a
- 22 community. We all want to reuse more.
- 23 When it comes down to it, we've been raising
- 24 -- we've raised sorbent about 40 percent over the past
- 25 three years, just to replace our aging infrastructure,

- 1 to keep existing levels of treatment. And probably for
- the next 10 years, we're going to be fighting this
- 3 battle with aging infrastructure and replacements of
- 4 sewer systems. If -- you've seen it. You've seen, in
- 5 Lahaina, we've got projects everywhere, we've been
- 6 digging up the roads. South Kihei Road, right now we're
- 7 doing projects, Kahului Beach Road. All over the
- 8 island, we see these very expensive sewer projects going
- 9 on because the wastewater system is about 35 years old,
- 10 it's failing. And it's taken a lot of money and it's
- 11 going to continue to take a lot of money to replace
- 12 that.
- 13 So the question for us as the community, for
- us as the owners of this sewer system, what do we want a
- 15 do? Do we want to raise rates and do more reuse, or do
- we want to keep rates low and not do that?
- 17 At the end of the day, we're going to listen
- to you. Through the elected officials, through
- 19 processes like this, the public's going to decide what
- 20 we do. And the public is going to pay for it.
- 21 So we're not a private company. You own the
- 22 sewer system. And that's just one thing that's, a lot
- of times, lost when we -- when we have these
- discussions, is somehow people think that -- that we'll
- 25 get money from somewhere else. But it's your money.

- 1 And if this is what you want to do with it,
- 2 this is what the County will do. But that means higher
- 3 rates. It means other things you may want, other sorts
- 4 of environmental projects, roads, parks, whatever, this
- 5 would be the priority. And that's something that --
- 6 that, if that's the priority of the community, of course
- 7 we'll do.
- 8 How this permit fits in is EPA doesn't give us
- 9 money. The Federal Government doesn't give us money.
- 10 They basically set permit requirements that we're
- 11 expected to follow. So how the permit fits in with our
- 12 operation is anything that they say in our permit that
- 13 we have to do, that kind of goes to the top of the list
- when it comes down to County budget. And that's not
- 15 really a choice anymore that we locally have -- get to
- 16 make. We don't get to decide, hmm, is it worth it.
- Once it's in a Federal permit, we're mandated to do it.
- And we will, basically, just define how much money we
- 19 need and make -- raise rates accordingly.
- 20 So I hope, just in general, that kind of gives
- 21 you some background of the system we operate, the
- 22 financial system we operate, and how -- the two things
- we really need to remember is we generate the waste,
- 24 we're going to have to decide how we want to get rid of
- it, and we're all going to have to pay for it.

- 1 So with that, whatever the public feels we're
- gonna do -- we need to do, that's what we'll do. But we
- just need to remember, we all own the sewer system,
- 4 we're all going to pay for whatever we want to do with
- 5 it.
- 6 So that concludes.
- 7 MR. DAVID ALBRIGHT: Okay. Thanks, Dave.
- 8 If anyone -- we are not really having a
- 9 question and answer session. If someone has any
- 10 clarification questions about what Dave just presented,
- 11 we could take a question or two. Otherwise, I am going
- 12 to -- yes. Why don't you -- if you have a question,
- 13 could you come up to the mike, just to clarify
- 14 something? If you could say --
- 15 MS. IRENE BOWIE: My name is Irene Bowie. I
- 16 am the Executive Director of Maui Tomorrow Foundation.
- 17 And I did just want to comment on what you
- just spoke on as far as not only wastewater, but isn't
- 19 it true that -- that we have been taking leachate, a
- 20 quarter of the leachate from Central Maui Landfill to
- 21 Kahului treatment facility and Kihei treatment facility,
- and that has been ending up on the reefs? So it's not
- 23 just our wastewater right now that's going out to the
- 24 reef?
- 25 MR. TAYLOR: It is correct that we have -- we

- do process the leachate from the landfills in the
- 2 wastewater treatment plants. So our -- our belief is
- 3 that most of the material from that probably ends up in
- 4 the biosolids and not in the water.
- MS. IRENE BOWIE: Although, we haven't done
- 6 any testing of --
- 7 MR. TAYLOR: That is correct. That is
- 8 correct.
- 9 MS. IRENE BOWIE: Thank you.
- 10 MR. DAVID ALBRIGHT: Okay. Why don't we take
- 11 one more? And then I would like to move to the next
- 12 speaker.
- 13 MR. JOHN SEEBART: Hi. My name is John
- 14 Seebart. I just have two quick questions for
- 15 Mr. Taylor. One is, how long at the Honokowai injection
- 16 plant does it take for the water to get from the plant
- into the water?
- MR. TAYLOR: No one is exactly sure. There --
- 19 there has been a recent study in Kihei that the USGS did
- 20 that showed that it took about two to five years for the
- 21 water from the injection wells to reach the ocean. And
- 22 our guess is because the -- the geometry is kind of
- about the same. They're about the same depth. The
- 24 water has about the same specific gravity. It floats
- 25 upward. We would guess it would be similar. But that

- 1 was a -- that was a mathematical model.
- 2 Anytime anyone has tried to actually do an
- 3 empirical test, to dump like a trace element in the
- 4 injection well and find it in the ocean, no one has been
- 5 successful actually tracing it. So one knows for sure.
- 6 But they do have these hydrogeologic models, computer
- 7 models, that have estimated, you know, two to five
- 8 years, depending on the conditions.
- 9 MR. JOHN SEEBART: All right. Thank you.
- 10 The other question was, I understand the
- dollar issue, you know, of what you have to spend, but
- 12 I'm just curious about the water being treated with
- 13 ultraviolet for the golf course, which makes sense, but
- 14 what about the water -- I mean, why -- what's the
- 15 thinking that we don't need to do that for the water
- that's going into the ocean?
- 17 MR. TAYLOR: That's a great question.
- 18 How we disinfect the water is driven by the
- 19 Department of Health rules and regulations in State law
- for wastewater treatment. And, basically, the water
- 21 that's reused on -- on golf courses and greenways and
- 22 things is considered R-1 quality, which is used for
- 23 reuse. And by Department of Health rules, that has to
- 24 go through a certain level of disinfection, which
- 25 includes either long periods of chlorination or

- 1 ultraviolet disinfection. Water that goes down the
- 2 injection wells, by State law, does not need that same
- 3 level because it doesn't have direct human contact in
- 4 the short-term. And my guess is that the Department of
- 5 Health feels that from the time it takes for that water
- 6 to make it to anywhere where there's human contact,
- 7 there's a long period of time where pathogens are
- 8 naturally, you know, destroyed during that time period.
- 9 I don't know that -- the exact reasons why Department of
- 10 Health sets their laws that way, but we are -- we comply
- 11 with those Department of Health rules.
- MR. JOHN SEEBART: Thank you.
- 13 MR. DAVID ALBRIGHT: Okay. Thank you, Dave.
- 14 Next, I would like to have Nancy Rumrill give
- 15 a very brief presentation about the permit, which is, of
- 16 course, the reason that we're here tonight, and a little
- 17 bit about the EPA's authority under the Safe Drinking
- 18 Water Act. So let me turn it over to Nancy Rumrill.
- MS. NANCY RUMRILL: Okay. I am just going to
- 20 cover the Underground Injection Control program and,
- 21 briefly, a little bit about the Draft Permit.
- 22 Under our Underground Injection Control
- 23 program, we -- it's a Federal program under the Safe
- 24 Drinking Water Act. And we are charged with protecting
- 25 underground sources of drinking water.

Τ	Underground sources of drinking water or
2	underground aquifers, they have less than 10,000 parts
3	per million of total dissolved solids. And if you think
4	of total dissolved solids as it's all inorganic and
5	organic substances in water. For reference, this
6	secondary drinking water standard is 500 parts per
7	million total dissolved solids. And this is what your
8	drinking water may have in it.
9	In comparison, seawater is 35,000 parts per
10	million total dissolved solids.
11	Under the Underground Injection Control
12	program, the most important requirement that we regulate
13	is that no owner or operator shall construct or operate
14	an injection well in a manner that allows the movement
15	of fluid containing any contaminant into an underground
16	source of drinking water if the presence of that
17	contaminant may cause a violation of the primary
18	drinking water standards or may adversely affect public
19	health. So under the Safe Drinking Water Act and the
20	Underground Injection Control regulations, EPA has the
21	authority to issue permits for underground injection
22	control activities in order to ensure protection of
23	underground sources of drinking water.
24	EPA and the State of Hawaii both have
25	responsibility to protect underground sources of

- drinking water. But the Underground Injection Control
- program does not regulate surface water bodies,
- 3 discharges to surface water bodies.
- 4 Maui County has applied for renewal for their
- 5 Underground Injection Control Permit, to operate their
- 6 four Class V injection wells to dispose of treated --
- 7 secondary treated wastewater at the Lahaina Wastewater
- 8 Reclamation Facility. And the renewed permit would be
- 9 issued for a period of 10 years, and it would be
- 10 reviewed every five years to determine if any
- 11 modification or any other action would be required to
- 12 protect underground sources of drinking water.
- The permit conditions are being updated to
- 14 reflect a permit modification that was done in 1999.
- But, otherwise, the permit conditions aren't changing in
- 16 this Draft Permit.
- 17 The most important part of the -- the Draft
- 18 Permit, there are conditions for well construction. And
- 19 the well construction has a surface casing and it goes
- down to the full extent of protecting the shallow
- 21 groundwater that has less than 10,000 parts per million
- total dissolved solids.
- 23 The total well depth is 180 to 255 feet below
- 24 ground surface. The treated wastewater flows by gravity
- 25 into the wells, and into the injection zone where the

- water quality is up to 35,000 parts per million total
- dissolved solids. So similar to seawater.
- 3 The Draft Permit also has in it conditions for
- 4 the injected wastewater. Its limited biological oxygen
- demand is at 60 parts per million, and total suspended
- 6 solids is at 60 parts per million. And then the
- 7 biological oxygen demand of total suspended solids are
- 8 good indicators of how polluted the water is. And if
- 9 these quantities are kept low, that indicates good
- 10 quality wastewater.
- 11 Also, in the Draft Permit, there's a condition
- for total nitrogen action level. And that's at 10 parts
- 13 per million.
- In the Draft Permit is also requirements for
- 15 Maui County to properly maintain and operate its
- 16 injection wells.
- 17 And then, this public hearing is part of our
- 18 effort to collect additional information and supporting
- 19 materials.
- The Draft Permit and statement of basis and
- 21 the application and the comments we've received so far
- 22 have been online. And they are currently online. So
- 23 you can refer to those at
- www.epa.gov/region09/water/groundwater/UIC-permits.html.
- 25 And if you want, I can give you a sheet on that website,

- 1 if you need to refer to it.
- 2 And as our Hearing Officer mentioned, our
- 3 proceedings of our hearing is being recorded by the
- 4 court reporter. And our transcript will be online.
- 5 When we have it available, we'll post it online.
- 6 And that's it. And our Hearing Officer can
- 7 take over.
- 8 MR. DAVID ALBRIGHT: Okay. Thank you, Nancy.
- 9 And, likewise, if anyone has any clarifying
- 10 questions about what Nancy just spoke about and would
- like to ask them, we can entertain a couple.
- 12 And seeing no hands, I guess we'll move to the
- public comments. And so we do have quite a few people
- who have requested to speak. And, obviously, we want to
- 15 hear from everyone tonight who has requested to speak.
- 16 So I would ask that you try to keep your remarks to five
- 17 minutes, at the most.
- And what we're going to do is we will call
- 19 people up to the podium here. And we'll call people in
- the order that they signed up. And if, when you come
- 21 up, you could give your name and any affiliation that
- 22 you have, that you would like to give, so that our court
- 23 reporter could document that, that would be helpful.
- 24 Again, I just want to reiterate that we're
- 25 here to listen to public comments. And I know that a

- 1 lot of people have a lot of issues and concerns. And if
- we can clarify matters, I certainly want to do that.
- 3 But we are not looking to get into an extensive debate
- 4 about these matters. We are really here to listen,
- 5 mostly, to the comments that you have to give to us, in
- 6 addition to any comments you would like to provide in
- 7 writing, or perhaps have already provided.
- 8 So with that, I would like to call up Brooke
- 9 Porter as the first commenter. Brooke.
- 10 MS. BROOKE PORTER: Good evening. My name is
- 11 Brooke Porter. And I'm with Pacific Whale Foundation, a
- 12 Maui-based nonprofit organization.
- 13 We're opposing the permit application to
- 14 continue injecting the nitrogen-laden wastewaters into
- 15 the nearshore environment off island.
- According to a NOAA study, Hawaii's
- 17 reef-related tourism and fishery activities generate
- 18 \$360 million annually for the State's economy. Covering
- 19 410,000 acres Hawaii's reefs are valued at an estimated
- 20 \$10 billion. The degradation of the coral reefs in
- 21 nearshore waters around Maui threatens to impact not
- 22 only tourism and commerce, but, also, our local ways of
- 23 life.
- 24 Maui's coral reefs provide a destination to
- 25 visitors, a barrier against elements, they provide

- 1 residents with recreational activities, and allow others
- 2 to practice subsistence gathering.
- 3 Studies show that, in some areas around Maui,
- 4 our coral cover has diminished by 90 percent over the
- 5 past decade. Resource managers from Maui's DLNR
- 6 presented scientific evidence of the decimation of
- 7 Maui's nearshore reefs to Maui audiences on June 19th
- 8 and August 14th, 2008. The presentations depicted an
- 9 abnormal and rapid shift from a dominant coral cover to
- 10 a dominant algal cover in areas near injection wells.
- 11 They're not the only contributing factor to coral loss.
- 12 These areas show significant correlation to injection
- 13 well sites. The hydraulic conductivity coupled with the
- differences in salinity between injectate in groundwater
- and causes leaching of effluent to surrounding aquifers
- in coastal waters, resulting in at buoyant plume that
- displaces other shoreward flowing groundwater.
- According to a 2006 USGS model, groundwater
- 19 discharging from the core of an injection plume is made
- 20 up of nearly 60 percent effluent ashore. The high
- 21 levels of nitrogen-bearing nutrients found in effluent
- 22 are pollutants and trigger and agal blooms adversely
- affecting our coral reefs. It's prudent that the
- 24 Lahaina Injection Permit also meet permitting
- 25 requirements defined under the Federal Clean Water Act

- 1 and State Pollution Control.
- 2 As a marine centric organization, Pacific
- 3 Whale Foundation's goal is to protect the valuable coral
- 4 reefs and their dependent organisms and ecosystems. We
- 5 ask that a practicable approach be taken and that,
- 6 "Water reuse is recognized as an environmentally
- 7 preferred method of disposing treated wastewater when
- 8 compared to the traditional disposal methods throughout
- 9 holes in injection wells." As stated in the 2004 Hawaii
- 10 Water Reuse Survey and Report prepared for Hawaii DLNR.
- 11 To date, the County has failed to bear the
- 12 necessary burden of proof required by the permit
- application that the continued injection of wastewater
- will not result in the release of nitrogen-bearing
- 15 nutrients and other water pollutants from our coral
- 16 reefs or impair commerce and tourism.
- 17 The County has also failed to demonstrate that
- the continued injection will yield significantly lower
- 19 costs and higher benefits for the citizens of County --
- of the County when compared to phasing out injection
- 21 wells in favor of reuse. Rather, cultural and
- 22 ornamental irrigation, fire prevention, stream flow
- restoration and replenishment and other purposes.
- 24 Simply stated, the County has not adequately explored
- 25 all possible uses of wastewater effluent.

- 1 Knowing that wastewater injection wells pose
- 2 serious threat to nearshore waters and coral reefs, we
- 3 ask that the permit application be denied and that the
- 4 EPA require wastewater to be treated to an R-1 level and
- 5 water reuse strategies be prioritized over the dated
- 6 method of injection wells.
- 7 Thank you.
- 8 MR. DAVID ALBRIGHT: Okay. Thank you.
- 9 Tonya, are you okay?
- 10 MS. BROOKE PORTER: Does she want --
- 11 MR. DAVID ALBRIGHT: I was going to say, if
- 12 people have prepared remarks that they're reading, if
- they would like to submit them, that would be great.
- 14 Thank you.
- Okay. Hannah Bernard.
- 16 MS. HANNAH BERNARD: Aloha. And mahalo for
- being here to hear our testimony.
- 18 I am Hannah Bernard, President of Hawaii
- 19 Wildlife Fund. I'm representing Hawaii Wildlife Fund,
- the Maui Reef Fund, and DIRE Coalition. That's the
- 21 Don't Inject, Redirect Coalition, a group of nonprofits
- 22 and residents concerned about our injection wells affect
- 23 our nearshore environment.
- 24 While we acknowledge that there are other
- 25 sources of pollution that you have to nearshore waters,

- land-based pollution, we understand that this hearing
- 2 tonight is focused on the permit for the injection wells
- 3 for the Lahaina wastewater treatment system. And I will
- 4 be focusing on that.
- 5 In light of the legal, moral and ethical
- 6 mandates of Public Trust Doctrine and the precautionary
- 7 principle interpreted by Hawaii Supreme Court to be
- 8 implicit or embedded in our State Constitution, the
- 9 State's policies on water recycling and reuse of treated
- 10 wastewaters, State and Federal pollution laws, the
- 11 County's own Community Plan, and the steep decline of
- our reefs, we must act swiftly to stop the flow of
- wastewater into the ocean, or seepage. Maybe not flow,
- maybe it's creeping, but it's going there, as was
- 15 already admitted.
- We oppose an unlimited and unconditional
- 17 renewal of the wastewater injection permit for this
- system and request, respectfully, that the EPA denies
- 19 this permit on current record.
- Instead, we ask that the EPA, Maui County and
- 21 the community engage in a meaningful conversation and
- action plan about how to best stop or phase out this
- 23 wasteful practice of injection of these waters, and,
- 24 instead, redirect treated R-1 waters for beneficial
- uses, as is the State's policy.

- 1 We urge you to consider the seriousness of the
- dialogue in the face of ongoing drought. As many of you
- 3 know, in August of this year, the County of Maui and the
- 4 State of Hawaii were designated as Federal disaster
- 5 areas by the U.S. Agriculture Secretary Edward Schafer,
- 6 because of the ongoing drought conditions.
- 7 Annual wildfires. We have recurring
- 8 wildfires. We've lost more than 10,000 acres of land to
- 9 wildfires, partly because of these ongoing drought
- 10 conditions. Reusing the wastewater could create a
- 11 greenbelt.
- 12 Reef degradation. Significant algae
- 13 overgrowth of Maui reefs is correlated with the three
- 14 County wastewater injection well systems, significantly
- 15 so. And we appreciate that the EPA employed the
- 16 precautionary principle and asked for a cap on the
- amount of effluent that could go into the Lahaina
- injection wells, reduced the amount of nitrogen, and,
- 19 also, encouraged some reuse of that water. But we can
- do better.
- We can't afford to lose any more reefs. We've
- 22 watched them decline in 10 years dramatically. Since
- 23 Wendy Wiltsie was brought here from your office, in
- 24 1994, because of the pernicious algae bloom, we have
- 25 seen a steady decline. And we know now, from recent

- 1 studies by the USGH, UH, and Department of Aquatic
- 2 Resources that our reefs are impacted by wastewater.
- 3 We also have issues of stream diversion. A
- 4 recent Water Commission decision in just this year, or
- 5 just September, will be returning millions of gallons of
- 6 water to streams in East Maui. This has ramifications
- 7 for West Maui.
- 8 Currently, the large ag farmlands are not
- 9 using the stream water -- they're not using the
- 10 wastewater because it's not cost-effective for them.
- 11 Because they're diverting the streams and they're paying
- so little for that water per gallon, sometimes as little
- as 15 cents per gallon.
- 14 So this will be probably halted or, at least,
- 15 reduced in the near future. And in order to support our
- 16 ag as well as support the rightful return of water to
- 17 the streams for the kalo farmers and for the health of
- 18 the streams, we need to start reusing our wastewater.
- 19 We also want to decrease waterborne
- 20 infections. We know from research done in the Florida
- 21 Keys that human pathogens are found in coral mucous
- 22 nearshore, both bacteria and human viral (inaudible)
- 23 viruses. And, also, as far as seven miles offshore,
- 24 human viruses are found in coral mucous.
- Not to mention the harm to our economy.

- 1 That's already been discussed. If we add in the value
- of habitat loss from marine life, the loss of esthetic
- 3 and cultural value and the loss of storm wave
- 4 protection, if we lose our reefs, the cost is
- 5 incalculable.
- This is why we call our coalition DIRE, Don't
- 7 Inject, Redirect, because the situation is dire and
- 8 requires a change of direction starting now.
- 9 Maui's water is just too precious to waste,
- 10 even the wastewater. Our coral reefs are too precious
- 11 to waste. If we lose them, we lose not only our
- 12 livelihoods, we lose our way of life and our quality of
- 13 life.
- 14 This permit must be denied based on three
- 15 arguments. And I am going to just summarize them
- 16 because I know I'm -- do you have a time? Any idea how
- long I've got? Too long already?
- 18 There's three reasons that we -- that the
- 19 County must be denied this permit.
- 20 First: The County of Maui, as the public
- 21 trustee of the County's water resources, and the State
- of Hawaii, are mandated by the State Constitution and
- 23 Supreme Court decisions to seek the best uses of all
- 24 County waters, including wastewaters. Because the
- 25 County has not conducted the necessary exploration of

- 1 possible beneficial uses for these wastewaters and has
- 2 not concluded that such beneficial uses do not exist,
- 3 the permit should be denied.
- 4 Secondly: The County has failed to bear the
- 5 burden of proof of entitlement to the requested permit.
- 6 Under the applicable Federal and State court decisions,
- 7 it means that with respect to all material of issues
- 8 effect, the permit applicant has the burden of
- 9 persuasion. The precautionary principle applies to the
- 10 County in its role as public vestee of all the State's
- 11 water. Therefore, the County must practically seek the
- 12 highest and best use of Maui's water and ensure
- 13 protection of ocean waters and coral reef ecology, even
- in the face of considerable uncertainty.
- 15 The County has failed to bear that burden of
- 16 persuasion with respect to all the facts necessary for
- 17 entitlement to the permit under applicable -- under
- applicable principles of law. Accordingly, the permit
- 19 should be denied.
- Third: We offer, in a document that I will
- 21 leave with you, specific information, data and studies
- 22 that together demonstrate that the permit should not be
- 23 issued. And this block of information, even if the
- 24 burden of proof was ours, which it is not, the opponents
- to the permit, is far more persuasive and far bigger

- 1 than anything the County has put forth to support the --
- 2 the permit.
- 3 If the EPA concludes that it cannot deny the
- 4 permit, we request that you employ a suite of special
- 5 conditions and pollution prevention goals which are
- documented in writing, which I won't go into now.
- We are losing over 11 and-a-half million
- 8 gallons of wastewater a day into injection wells,
- 9 billions of gallons a year. And that water is needed on
- 10 the land.
- 11 And we support and request that the EPA and
- the County of Maui engage the communities of Maui to
- discuss the best use of our water and to keep our
- 14 healthy reefs thriving.
- 15 Mahalo for your time.
- 16 (Applause.)
- 17 MR. DAVID ALBRIGHT: Thank you for those
- 18 comments. And I do appreciate people keeping their
- remarks to five minutes. And if you're going too long,
- 20 I will start waving or something.
- I realize I didn't point out that the men's
- 22 room is on this side. We're going to be here a little
- 23 while tonight. So the men's room is over here through
- the doors, and the ladies' room is on the other side.
- The next speaker is George Lavenson.

- 1 MR. GEORGE LAVENSON: Thank you very much. I
- 2 am George Lavenson.
- First, I'd like to thank you for -- all of you
- 4 from San Francisco for making the great sacrifice to
- 5 come out here to Maui and hear us with this problem.
- And, very simply, the way we feel is we would
- 7 like to recommend increase in the recycling of our waste
- 8 and using it for irrigation purposes, for two reasons.
- 9 First: By using it for irrigation purposes,
- 10 we don't have to use our potable water for that. And by
- 11 using it, it's a better end for it than in the injection
- wells. What potable water we have is solely needed for
- human consumption here in West Maui, since it's often
- inadequate and at a premium, because of low rainfall,
- increase in population, overdevelopment, and use of
- 16 potable water for irrigation purposes. Obtaining water
- for irrigation of crops and landscaping by recycling
- 18 wastewater would leave more potable water for the human
- 19 consumption.
- In addition, this is a better way of dealing
- 21 with the wastewaters than the practice of injecting it
- 22 into -- the excess into wells, with unavoidable seepage
- 23 and into the coastal areas with resultant damage to our
- 24 priceless and dwindling pristine oceanic treasure.
- I have two recommendations.

- 1 First, I think that we should limit -- here we
- 2 are. We need to increase the infrastructure to recycle
- 3 more of the wastewater and deliver it to the irrigation
- 4 places -- I realize this is expensive -- and, thereby,
- 5 increase our irrigation of water, decreasing the waste
- 6 that has to go into injection wells.
- 7 And the second recommendation is maybe more
- 8 ours than yours, but with the Long Range Committee,
- 9 Planning Committee, getting some handle on the
- 10 overdevelopment that is producing the excess waste, and,
- 11 also, making the development companies more accountable
- for providing the infrastructure you spoke to. And it's
- 13 needed to handle the excess waste.
- 14 Thank you very much.
- 15 (Applause.)
- 16 MR. DAVID ALBRIGHT: Thank you for those
- 17 comments.
- 18 The next speaker is Irene Bowie.
- MS. IRENE BOWIE: Aloha. Irene Bowie of Maui
- 20 Tomorrow Foundation. And Maui Tomorrow is also a member
- 21 of the DIRE Coalition.
- Thank you for providing this meeting tonight.
- 23 Anyone with knowledge of Hawaiian hydrology
- 24 knows that coastal groundwater is connected to ocean
- 25 water. Yet, there seems to be a disconnect between Maui

- 1 County's stated plans and responsibilities under our
- 2 water use plan and the County's decision to continue to
- 3 inject these waters instead of conserving and reusing
- 4 them. This is not the kind of public stewardship of
- 5 County waters that is required by both the Hawaii
- 6 Constitution and the County's own policy.
- 7 Maui County recognized that it has the
- 8 responsibility to manage the County's waters when it
- 9 developed its 2007 Water Use Development Plan. That
- 10 plan finds and declares that water is a valuable natural
- 11 resource that should always be used wisely and managed
- 12 as a public trust. The 2007 plan also states that the
- 13 County's policy is to promote water conservation. Yet,
- Maui County's wastewater permit application does not
- 15 mention this 2007 Water Use Development Plan, and is
- 16 inconsistent with this plan, as the County's permit
- application to inject these wastewaters doesn't consider
- the possibility of conserving the wastewaters through
- 19 recycling and reuse. Nor does it recognize, let alone
- 20 satisfy, the County's duty to treat these waters as a
- 21 public trust.
- 22 For these reasons, Maui Tomorrow Foundation
- asks that the EPA not renew the injection well permits
- 24 without a plan of action and a timeline to correct this
- 25 harmful practice.

- 1 Maui Tomorrow Foundation has taken this
- 2 position because we fear that not all of the injected
- 3 wastewater stays in the well, but, instead, migrates,
- 4 leaks or seeps into the groundwater and may eventually
- 5 be entering Maui's streams and ocean waters.
- 6 It's clear from scientific reports that
- 7 underground injection and treated wastewaters is not a
- 8 foolproof way to ensure that no leaks occur. A recent
- 9 EPA report indicated that tracer studies in Florida's
- 10 Keys showed the release and migration of effluent into
- 11 area surface waters as soon as eight hours after
- 12 introduction of viral tracers.
- 13 The problems in West Maui's wastewater
- 14 treatment have become very obvious in recent years. Our
- 15 supporters have long advocated for the need to protect
- the nearby reefs along Kahekili Beach, directly seaward
- 17 from the wastewater treatment facility, from excess of
- 18 nutrient rich waters.
- 19 Sadly, there were no studies in 1996, when the
- 20 permit was first issued, linking reef health and the
- 21 nutrient levels of waters discharged from the Lahaina
- 22 wastewater plant through their injection wells. But now
- 23 studies have been done. And the reefs of Kahekili
- 24 undeniably show negative effects of not finding other
- 25 solutions for this problem. High degrees of bacteria

- and viruses have been found in the waters immediately
- 2 surrounding Lahaina wastewater plant's injection wells.
- 3 Ironically, the same reclaimed effluent
- 4 causing severe problems offshore is desperately needed
- 5 to irrigate the dry lands of Lahaina during times of
- 6 prolonged drought, such as we are experiencing now.
- 7 Maui Tomorrow Foundation supports redirecting
- 8 treated R-1 effluent to non-potable water uses. We
- 9 believe public and private funding should be found to
- 10 create additional treatment storage capacity and
- 11 delivery lines to transport the treated water. Not only
- for fire prevention, but, also, for irrigation of parks,
- 13 community gardens, greenbelts and other uses.
- 14 In addition, gray water could be used for
- 15 residential yard irrigation and toilet flushing.
- 16 Thereby, freeing up clean water now being used for these
- 17 purposes.
- 18 It is imperative to use this effluent for
- 19 irrigation and other non-potable uses in order to keep
- our reefs healthy and protect them from nutrient-rich
- 21 wastewaters increasing algae blooms. Wastewater
- 22 reclamation is the best solution. Existing reclamation
- 23 facilities should be upgraded and enlarged, and water
- and sewage lines laid as funds become available.
- We respectfully ask that any treatment plant

- 1 permit include conditions which will result in a
- 2 substantial reduction of wastewater pumped into
- 3 injection wells and an increase in the amount of
- 4 reclaimed water, as well as distribution systems to
- 5 utilize those reclaimed water.
- 6 Thank you.
- 7 (Applause.)
- 8 MR. DAVID ALBRIGHT: Thank you for your
- 9 comments.
- 10 The next speaker is Russell Sparks.
- 11 MR. RUSSELL SPARKS: Yeah. Good evening and
- 12 welcome to Maui. My name is Russell Sparks. I am with
- 13 the Department of Land and Natural Resources, Division
- of Aquatic Resources here on Maui.
- 15 I would, first off, like to thank the folks
- 16 from EPA for coming over here and holding a public
- hearing, and hearing from all the people who have showed
- 18 up tonight.
- 19 It's interesting for me to be here testifying
- in that I'm usually in the seat you're in, hearing from
- 21 the very same people who are speaking here tonight.
- 22 I'll be, just briefly, going over some of the points on
- 23 the testimony that we already submitted for the record,
- 24 submitted from my Administrator, Dr. Dan Polhemus.
- 25 Basically, our Division is responsible for

- 1 managing the living resources within the water. And
- 2 ultimately, that also involves coral reefs.
- 3 We've -- the monitoring team that works here
- 4 on Maui has been working pretty much yearly, as well as
- 5 multiple different types of surveys, for the last 14 to
- 6 15 years. And when we stitched together the long-term
- 7 data set, it was really clear that a lot of reefs are
- 8 declining quite substantially. The reefs right offshore
- 9 from the wastewater treatment plant have in fact lost
- about 50 percent of their coral cover over the last 14
- 11 years.
- 12 Recent work by the University of Hawaii Botany
- Department is starting to show more evidence that the
- 14 nutrients that are fueling some of these declines are in
- 15 fact likely the result of injection plumes.
- 16 Overall evidence that we see on the reef is
- that the coral reef cover is declining, erosion is
- increasing, and there's periodic blooms on the base of
- 19 algae that tends to smother out and kill and stress the
- 20 coral further.
- We recognize, certainly, that there's numerous
- 22 causes for coral reef decline. But what we would like
- 23 to see is that certain things that we can deal with and
- can address be addressed. And although that is costly,
- as Dave Taylor mentioned, and as though it will probably

- 1 cost the taxpayers and citizens of Maui a fair amount of
- 2 money to do that, it seems to be a high priority to
- 3 protect something so valuable for us here.
- 4 The conditions that we would like to see is
- 5 that, one, the EPA change the standards by which they
- 6 issue these permits. Groundwater should be --
- 7 protecting groundwater for drinking purposes is
- 8 important, certainly. But in areas like Hawaii, where
- 9 the injection wells clearly percolate into the nearshore
- 10 waters, the Clean Water Act should also be an indicator
- of whether or not permits should be issued.
- 12 The County of Maui currently injects somewhere
- between three to five million gallons per day. The
- water they treat to a very high level. In fact, we're
- 15 lucky here that our sewage treatment plants are run very
- professionally, by excellent staff, and they have
- implemented measures to greatly reduce nutrient levels.
- So, currently, about seven milligrams per liter on the
- 19 high end with the nutrient levels. What we ask is that
- the permits be set at those levels. In other words,
- volume should be set somewhere around five million
- 22 gallons per day and nutrient levels should be capped at
- 23 seven milligrams per liter. This would certainly
- 24 prevent these standards from getting any worse, and the
- 25 situation from getting any worse as we move forward.

- 1 We would like to see that overall permit
- 2 conditions are set in such a way that ultimately stage
- 3 out injection wells and encourage reuse. Certainly we
- 4 don't think that the County can stop injecting water
- 5 tomorrow. But we would like to see that, over the
- 6 years, there's an incentive for them to move that way.
- 7 And, last, we would strongly encourage that
- 8 our Federal partners, in managing our resources, such as
- 9 the EPA, and others, help our local governments fund the
- 10 needed infrastructure. Unfunded mandates don't help
- anybody.
- 12 So, again, I will drop off a copy of this
- 13 testimony. We do have some of the science behind our
- 14 concerns with the reef declines on it as well. And,
- 15 again, I thank you for the time. Thanks.
- 16 (Applause.)
- 17 MR. DAVID ALBRIGHT: Thank you for the
- 18 comments.
- 19 The next speaker is Jill Laffin.
- MS. JILL LAFFIN: Hello. My name is Jill
- 21 Laffin. I have been a resident of West Maui since 1987.
- I do want to thank you all for being here and
- 23 listening to all our testimonies.
- 24 We understand and sympathize with the
- 25 challenges that the EPA has faced during the last years

- of the exiting administration. However, the West Maui
- 2 Mountains and her watershed have been severely abused
- 3 and neglected for far too long.
- 4 Tonight, you're receiving testimony on
- 5 scientific, physical and economic reality of the
- 6 injection well system used here in this very, very
- 7 fragile ecosystem.
- 8 Thank you to all the professionals and
- 9 volunteers and members of this diverse community that
- 10 are here sharing testimony tonight.
- 11 In the late eighties, I used to make jokes
- about what would happen if everybody in Kaanapali
- 13 flushed their toilet at the same time. Since then,
- 14 we've added many, many toilets. Being reminded of the
- 15 substandard level that this system is currently
- operating, the thought of the five new towers being
- erected in Honokowai, at 500 rooms per building, being
- 18 added to this substandard system is no joke.
- 19 Before you begin the process of considering
- all the facts presented here tonight, I personally am
- 21 here to encourage you all to take some time to acquaint
- 22 yourself with the West Maui Mountains and her many
- 23 rivers, from Ukumehame to Honokohau Valley.
- 24 You will have to refer to topographical maps
- 25 prior to 1919 and the agricultural diversions presented

- 1 to our precious water system. This knowledge of the
- 2 blatant disregard for the flow of the watershed from the
- 3 mountain to the ocean might give you a better
- 4 understanding of the multitude of environmental issues
- 5 that we are facing here in West Maui.
- Tonight, you're learning about the true
- 7 effects of the injection well system on our reefs, our
- 8 marine life and, ultimately, us. The word
- 9 "responsibility" is simply the ability to respond. You,
- 10 as the Federal Environmental Protection Agency, have
- 11 that ability. With the Hawaii State Constitution Water
- 12 Rights and the Clean Water Act, I am confident that you
- will respond to the magnitude of this ecological
- 14 situation and do what is highest and best for this
- sacred part of earth, no matter what it costs.
- Thank you.
- 17 (Applause.)
- 18 MR. DAVID ALBRIGHT: Thank you for those
- 19 comments.
- 20 And the next speaker is Robin Knox.
- 21 MS. ROBIN KNOX: Hi there. Thanks for coming
- 22 to hear our concerns.
- 23 My biggest overall comment -- first of all,
- 24 I'm Robin Knox, I'm representing myself. I am a water
- 25 quality consultant with 25 years experience, including

- 1 ecological studies and being a regulator like yourself,
- 2 writing permits.
- 3 My overall comment is that neither the EPA nor
- 4 the County of Maui have provided sufficient information
- 5 to the public to demonstrate that the permit as written
- 6 is protective of the environment and in compliance with
- 7 applicable State and Federal laws and regulations,
- 8 including the Safe Drinking Water Act, Coastal Zone
- 9 Management Act, Clean Water Act, Hawaii State
- 10 Constitution and Hawaii Revised Statutes.
- 11 Your permit, in Part 3, Paragraph A, says that
- it doesn't authorize any injury to persons or property,
- or any infringement on state or local law or regulation,
- and that nothing in the permit should be construed to
- 15 relieve the permittee of any of these duties under other
- 16 regulations. So your own permit recognizes that there
- are other laws and regulations that need to be complied
- 18 with.
- 19 And the County is a public trustee of the
- 20 waters of the State. And has a duty not only to comply
- 21 with your permit and -- but to live up to that public
- 22 trust.
- 23 And, also, as all parties do, everyone has a
- 24 duty to comply with State water quality standards. No
- one is allowed to violate State surface water quality

- 1 standards.
- 2 However, if someone did discharge at the
- 3 levels allowed in your permit, they would be causing or
- 4 contributing to violations of those State water quality
- 5 standards.
- 6 So I urge you to really look at the rationale
- 7 for your permit limits and see if they could not be
- 8 stricter.
- 9 For instance, you have 60-60, 60 BOD, 60 TSS,
- 10 as your limits, and you call that secondary treatment.
- 11 But most places in the country, secondary treatment
- 12 would be 30 BOD, not 60. And, in fact, I believe the
- 13 State permit actually limits them to 30. So why
- shouldn't the Federal? I mean, if they are already
- 15 limited by another permit, this permit should be just as
- 16 stringent.
- 17 Also, the flow that's allowed seems really
- high compared to what they're actually discharging. And
- 19 so I think there needs to be a rationale for that.
- 20 And these two things combined, when you look
- 21 at the concentration and flow, your permit is allowing a
- 22 much larger mass discharge than I think is really
- 23 justified by any rationale that's presented. And I
- think if we got sufficient information to look at the
- 25 water quality impacts that we would in fact come up with

- 1 water quality base limits that are much lower.
- 2 The County has a duty to comply with these
- 3 water quality standards, whether your permit requires it
- 4 or not. But I think that if there are other
- 5 requirements that they have to comply with that you
- 6 certainly should have the authority to write your permit
- 7 at least that stringent. And especially if the County
- 8 would agree to it.
- 9 The overall effect of that would be to lower
- 10 the nitrogen loads which would improve the circumstances
- of what's going on.
- I believe that not only does this permit need
- to be issued with those kind of conditions, but that,
- 14 also, another permit is needed. And the MPDS permit,
- 15 the permit to protect surface water qualities. The
- 16 groundwater and coastal ocean waters are hydrologically
- 17 connected. That means that the groundwaters fit under
- 18 the definition of waters of the U.S. And there is no
- 19 allowed discharge from point source to waters of the
- 20 U.S. of pollutants without an MPDS permit. So I think
- one is warranted in this case.
- 22 And I submitted written comments that have
- 23 supporting details for that.
- So -- and in closing, I would just like to
- 25 remind everybody that either reuse or injection wells

- 1 are merely disposal technologies and they are not
- 2 treatment technologies. And regardless of what disposal
- 3 technology we choose, we need to make sure that the
- 4 treatment level is appropriate to go with it and that
- 5 the risk of exposure to aquatic life and human health is
- 6 minimized as much as can be. And that is a societal
- 7 decision because, as Dave said, we all have to pay for
- 8 this.
- 9 So I urge you to not only get the Clean Water
- 10 Act people involved, but, also, get the water quality
- 11 management and planning aspects of that program involved
- so that we can help the County to know what does it mean
- 13 to comply with -- with State water quality standards.
- 14 And I think that is EPA's job in this case.
- Thank you.
- 16 (Applause.)
- 17 MR. DAVID ALBRIGHT: Thank you for those
- 18 comments.
- 19 The next speaker is Ke'eaumoku Kapu. I'm
- 20 sorry if I didn't pronounce that correctly.
- MR. KE'EAUMOKU KAPU: Aloha. You live in
- 22 Oahu? You live in Oahu?
- MR. MOFFATT: No, I do not.
- 24 MR. KE'EAUMOKU KAPU: Oh, no. Okay. There's
- 25 a famous street called Ke'eaumoku Street. Everybody

- 1 knows it. Kind of interesting.
- Oh, yeah. My name is Ke'eaumoku Kapu. I am
- 3 here from Lahaina.
- 4 Kind of interesting that we find one subject
- 5 that has a commonality in all of us, and it's a pile of
- 6 crap. Kind of interesting that we all on the same side
- of the fence, too, when we discussing this matter of --
- 8 about injection wells.
- 9 So I sitting back over there in the back,
- 10 trying to gather some notes. And here's the kind of
- 11 things I came across: Probably; possibly; may not; and
- between two to five years; and last, but not least, the
- 13 County says that it belongs to us.
- 14 That kind of doesn't sit right for me because
- 15 I don't know where the concept of this injection well
- 16 came and whether or not it came to our families of this
- 17 place to be considered that an injection well for this
- 18 part of a historic -- national historic registered
- 19 district would be applicable for the constituents of the
- 20 representatives here.
- 21 Well, for me, I'm in -- I'm here as a
- 22 representative of Kuleana Kuikai (phonetic), LLC, and as
- a minority of the wards of the State. Minority, that's
- a big word. Ward, also, is a big word.
- 25 And when it comes to the general consensus,

- whether or not these things can be done, cannot be done,
- where does the money go, who pays for what, what
- 3 percentage goes where, the minorities, the wards of the
- 4 State, always left out.
- 5 There was a time when our kupuna, back then,
- 6 said -- you know, all these policies and changes are
- 7 coming. And they used to tell us, it's for our best, no
- 8 worry, let it go, we gotta take care of everybody, we
- 9 live on an island, we got to know how to take care of
- 10 everybody, not just ourself. And that's coming from the
- 11 minorities. And I talking about the Kanaka Maoli.
- 12 So we set ourselves aside to be pono in our
- 13 place, to make sure that, because of the political
- 14 process we go through -- there's a process that we elect
- the right officials to sit in office to make sure that
- they do things that will benefit us all.
- Well, 50 years went by, influxation of new
- 18 people come into our islands. Now we at the top of the
- 19 most endangered list in the State of Hawaii as
- 20 minorities to this State, where we have a Constitution
- 21 that's supposed to protect our rights, our gathering
- 22 rights, all these different types of rights. Now it
- 23 boils down to whether or not the County said they going
- 24 to take care of our system.
- 25 Never once any of my kupuna ever came and said

- 1 that we did this, we had to allow these things to happen
- for your future generations. We were never considered.
- 3 None of us.
- 4 When policies came in, all these different
- 5 changes, ordinances, CC&Rs, covenants, came over here,
- 6 we couldn't make sense of all these kinds of madness,
- 7 all these things, these new invasive ideas that came to
- 8 our 'aina. But our kupuna said, take heed, be pono,
- 9 don't worry, we gotta find ways of compromising.
- 10 Well, it's 2008. And down to the line, no
- 11 more compromise. 'Nough already.
- 12 I don't know what the possible solution is
- gonna be based upon taking care of the environment, but
- these are the kind of things that we were looking for
- 15 when they came down to the most simplest thing which had
- 16 to do with our Constitution of our Native Hawaiian
- gathering rights and how, all of a sudden, Maui County
- 18 lost their rights of gathering, fishing. And these kind
- 19 of issues was never considered, to see whether or not it
- was probable that the effect from these injection wells
- 21 may possibly had a lot to do with the reproductive cycle
- and the replenishment of our reefs.
- 23 Mahalo to Russell Sparks for his input on
- 24 algae bloom, his input on all the information that he
- 25 shared with us. It still defies the fact that we don't

- take into consideration about these kinds of things when
- 2 we start changing or reimplementing or allowing new
- 3 permits. We don't take into consideration about how
- 4 this gonna affect the fishing guy who trying to feed his
- family, how it's going to affect the guy who want to
- 6 stay in the mountains trying to grow kalo and feed his
- 7 family. They don't take into consideration all those
- 8 kind of things.
- 9 I sit here in the back, and I listen to all
- this scientific terminologies on milligrams and 500
- 11 million gallons of sewage going into the ground, and a
- certain percentage, and how many years it's going to
- surface to the top, until our environment gets affected.
- 14 It drives me crazy to sit here and listen to all this
- 15 madness, knowing that our brain -- we so intelligent, we
- 16 more intelligent than the earth. And the earth cannot
- 17 catch up with our intelligence. We killing her. We
- 18 killing her faster than we realize.
- 19 And the bottom line, all it boils down to, is
- one simple little permit, we need to consider on how we
- 21 gonna take care of the mass people that we have now, not
- 22 take into consideration maybe possibly asking the County
- 23 how many more development on the west side is coming. I
- hear 10,000 homes. So, what? That means more injection
- 25 wells, more sewage plants, more this, more that. Drives

- 1 me crazy.
- 2 So on behalf of the minorities of this state,
- 3 find it within you na'au, think about the most simplest
- 4 thing, the farmer and the fisherman, the person that
- 5 just trying to provide for his family. Which literally,
- 6 to this point, we getting screwed and to the point where
- 7 I guess our representative for the County said it
- 8 belongs to us. Nah, that's just an excuse. It's just
- 9 an excuse to say that, because none of my kupuna told me
- 10 that, oh, we did this for you. They told us, oh, hamau,
- 11 no get involved, no worry.
- 12 Kind of interesting, I standing over here.
- Because, normally, when I come up and testify, I stay on
- 14 the opposite side of the fence. So the commonality of a
- 15 pile of shit, wow, I love it, because it brings
- 16 everybody together.
- 17 Mahalo. Thank you very much.
- 18 (Applause.)
- 19 MR. DAVID ALBRIGHT: Thank you, Mr. Kapu.
- 20 Corrin [sic] Pang is the next speaker. Lorrin
- 21 Pang. I'm sorry.
- DR. LORRIN PANG: It's okay. Thank you. I
- 23 will speak as a private citizen. I am a physician. I
- 24 used to run the bacteriology lab for Walter Reed. I've
- 25 taught epidemiology and biostatistics for the World

- 1 Health Organization since 1985.
- 2 I'm a little bit new to this field, but I'm
- 3 not new to regulations versus science. The whole thing
- 4 really is summed up in Number 10 of your fact sheet
- where it says, "Studies do not prove that nutrients,"
- dah, dah, dah, "damage the reef." We've seen this kind
- of statement before, "studies do not prove." You can
- 8 also say studies do not prove that it doesn't hurt the
- 9 reef or that it does hurt the reef. The thing is
- 10 studies -- you will never study the system adequately.
- 11 There was just a publication last month in
- 12 proceedings of National Academy of Science saying how
- difficult it is to predict the ecological effects, both
- 14 affecting the reef and on health issues. So, tonight, I
- 15 was just going to speak about health issues. But since
- 16 everyone is concerned about the reef, we can talk about
- 17 that.
- The next thing, the issue that comes up, is
- 19 Number 13. You have criteria for the nitrogen. You
- 20 have criteria for BOD. You got criteria about
- 21 sedimentation. I'm not real sure how these criteria
- 22 relate to science, reef protection or health. And I
- 23 will bet you -- having read what the proceedings of
- 24 National Academy of Science said, I bet you that no one
- 25 really knows. So shall we study it some more?

- 1 I bet you we could study it more and, after 10
- 2 years, never come up -- never be closer than we are
- 3 today. Well, we might be a little bit closer, but not
- 4 for sure. So we will always be kind of vague. Studies
- 5 that show this and study that show that. So on the
- 6 precautionary principle, I have to agree with the former
- 7 speakers that said, let's not do it.
- 8 But let me tell you a little story about --
- 9 about criteria versus science. It's about five years
- ago, on Maui, we followed the EPA criteria, Region 9,
- 11 this was the water Upcountry. And not only did we meet
- 12 the criteria, there was a mandated additive, it's called
- 13 C9. We were told to put C9-phosphate into the drinking
- water. Well, lo and behold, people complained of rash.
- And lo and behold, when we brought this up with the EPA,
- 16 they said, gee, Dr. Pang, 500 communities put this thing
- in and nobody complains about rash except us.
- Well, first of all, us is a little different
- 19 because we're in tropical climates. And when we did
- 20 call the EPA, they did admit that, in the summer months,
- 21 in Ohio, all the way through Louisiana, people did
- 22 complain about the rash. And so this kind of came up
- that, gee, were we covered up, or did they just think
- that we were just like the mainland. Because in
- tropical climates, staph, all these pseudomonas, the

- 1 reef, things are very different.
- 2 And so we do not follow, very closely,
- 3 criteria, especially if they're set in different
- 4 climates or different kinds of waters with that
- 5 nutrient.
- 6 But to make a long story short, we actually
- 7 did prove that all samples from Upcountry drinking water
- 8 were highly contaminated with very high levels of
- 9 pseudomonas. Okay. And the EPA had to rethink and they
- 10 cut down the additive, then they removed the additive,
- 11 and the rashes went away.
- 12 So when you set criteria or you set mandates,
- in this case it's a criteria, I'm not sure the science
- is there to back it up.
- 15 But I want to say something constructive.
- 16 What shall we do? Shall we go ahead with the permit or
- 17 what do we do? Why don't we just go ahead with it on a
- 18 year-by-year basis and kind of step it in? We approve
- 19 it, but I want to see progress into reclamation of
- 20 water. And I want to see more and more (inaudible).
- 21 It's kind of like switching from oil to wind power. We
- 22 can't just cold turkey switch, but I want to see
- 23 progress. And the permit is looked at every year or two
- 24 years. And if we don't see progress, then it's ended.
- 25 So I know it's a shocking system to switch,

- but can't we have some kind of step wise adjustment?
- I do not think -- you can study up the wazoos,
- 3 I will try to look at the data itself, but I don't think
- 4 we're gonna get too far with studies.
- 5 Thank you.
- 6 (Applause.)
- 7 MR. DAVID ALBRIGHT: Thank you for those
- 8 comments.
- 9 And thanks, everyone, for keeping to time
- 10 limits. I think we are doing well.
- 11 The next speaker is Wayne Cochran.
- 12 MR. WAYNE COCHRAN: Hi. Thanks for coming and
- hearing us. My name is Wayne Cochran. I am with
- 14 several environmental groups, Maui Unite, Honolua
- 15 Coalition and, also, DIRE.
- 16 I'm -- I am representing the surfers, I think.
- 17 I own Maui Surfboards. It's a mom and pop shop. It's
- over 40 years old. I'm in the water nearly daily. And
- 19 I started doing stand-up paddle-boarding, where you
- 20 paddle up and down the coast. And, you know, from six
- 21 feet up, you get a real good view of the reef.
- The last five years, I've seen the reef
- 23 just -- the live coral disappear right before my eyes.
- 24 It's just fading so fast. And I've also seen the fish
- 25 disappear.

- 1 Like Ke'eaumoku said, they got gathering
- 2 rights. And there's no more fish because there's no
- 3 more reef. And I see this because of the algae bloom.
- 4 And it's incredible, you know. And it's been proven
- 5 where the injection wells are, the algae bloom is -- has
- 6 just destroyed the reef and the sea life.
- 7 The reef-related tourism business and
- 8 fishing-generated businesses have given an average of
- 9 \$360 million a year, according to the NOAA Economic
- 10 Study.
- Now, if we lose this reef because of
- injecting, you know, that's a god-awful shame, and
- 13 that's our fault, you know. This is -- this is our
- 14 mission to change this.
- 15 You know, 25 years ago, when we -- when we cut
- off the direct sewer into the ocean, we started
- 17 injecting it, thinking that would filter, that was state
- of the art then, to inject it. But, now, we don't have
- 19 the time for our reefs to keep doing that. I totally
- think we should at least get that ultraviolet channel in
- 21 here. At a cost of \$5 million to make that ultraviolet
- 22 channel, we're going to at least save those microbes,
- 23 those bacteria from going in the reef which, you know,
- 24 we can know if a beach is polluted. If you go there,
- 25 you know.

- 1 I go in the water. This is a scratch from
- 2 about -- (indicating) -- it's about three or four weeks
- 3 old. You know, it just -- I keep it clean. But all our
- 4 little scratches turn into craters, you know.
- And, anyway, we got to keep the bacteria out.
- 6 The fish don't know that there's bacteria in there. The
- 7 turtles end up with tumors and stuff. We really gotta
- 8 -- we gotta really -- the ultraviolet channel is a quick
- 9 -- a quick save on that one, you know.
- I know a lot of guys that work in the
- 11 Honokowai Sewer Treatment Plant. I've toured it four
- 12 times, at least. And for your -- for the community's
- information, a couple of choice items they found
- 14 clogging the sewer line, one was a bowling ball. How
- 15 that got there. And pig, there were pig -- pig and pig
- 16 parts in there all the time. So --
- 17 But the main clogger right now is pretty new.
- 18 It's those paper wipes. You know all the different kind
- of wipes, that stuff clogs. It doesn't break down like
- 20 everything else with the treatment plant. That's our --
- 21 that's something we got to think about. Throw those
- things away, don't flush 'em.
- The three million gallons plus that are daily
- 24 injected could be applied to a pipeline and water the
- 25 Civic Center area, right around here, instead of using

- 1 sweet water from the mountains, and, also, water the
- 2 park area. They could take -- we could have this whole
- 3 park so green and lush, you know, with the R-1 water.
- 4 And -- and it would -- it's less -- it's less than two
- 5 miles to run the piping down here. It already goes to
- 6 the end of Kaanapali Golf Course, which isn't very far.
- 7 And the Kaanapali Golf Course also uses sweet
- 8 water mix. They take almost two million dollars -- two
- 9 million gallons a day of water for that.
- 10 The algae blooms confirm there's nitrates,
- 11 they're killing our reef. The EPA must improve --
- 12 impose conditions that will eliminate the injection
- wells eventually.
- With so much new development, the Kaanapali
- 15 Treatment Plant will be maxed out in the foreseeable
- 16 future. Those guys are -- they're working hard to keep
- 17 up with what gets -- coming -- comes to 'em, you know,
- 18 with all -- it's just -- it's always outdated.
- 19 The community needs to support modernization
- of all the Maui's treatment centers. And they got to
- 21 try to don't inject, redirect.
- Thank you.
- 23 (Applause.)
- 24 MR. DAVID ALBRIGHT: Thank you. Thank you for
- 25 your comments.

- 1 The next speaker is John Seebart.
- MR. JOHN SEEBART: Hello. My name is John
- 3 Seebart. And I am speaking as a private citizen, also.
- 4 However, I do volunteer with DAR as a reef surveyor.
- 5 And we look at herbivore species on the reef and what
- 6 they're eating and how much they're eating and so forth
- 7 over a period of time.
- 8 We've primarily studied sturgeon fish and
- 9 parrotfish, which is about 25 different actual
- 10 varieties.
- 11 I got involved in this about a year and-a-half
- ago. And, subsequently, I've learned about some of
- these things in the -- the injection plant and so forth,
- 14 and the phosphates and nitrates, and how they cause the
- 15 algae blooms, because essentially they're fertilizer.
- 16 This reef out here at Kahekili is one of our
- 17 spots where we are actually working on a regular basis.
- 18 And we also work in Olowalu and Honolua Bay and Kapalua
- 19 Bay, and some other places occasionally.
- We don't work in Ma'alaea Bay, which is an
- 21 interesting place because Ma'alaea Bay, 25 years ago,
- had about, they reckon, 75 to 80 percent coral cover
- 23 throughout the bay. And now that bay is down to four
- 24 percent with invasive algaes covering the reefs. And
- 25 the fish are gone and the reefs are gone. And there are

- 1 -- there are places along there where the private condos
- in Ma'alaea inject, also, as well as there's a --
- 3 there's a Maui treatment plant in Kihei.
- 4 I'm not really sure what happened there, but
- 5 we do have invasive algaes. And these are things that,
- 6 once the algae starts to go and the reef starts to go,
- 7 this provides an environment for human pathogens to live
- 8 in. And it doesn't really matter -- I mean, well, it
- 9 does matter, but we can't prove whether the pathogens
- are coming from the treatment plant or not. But once
- 11 the pathogens are -- or the pathogens are in the water.
- 12 And as the reef declines, the water gets worse.
- Now, it turns out that Maui County has the
- 14 highest level of methicillin-resistant staphylococcus
- orius hospitalizations in the country of about 188 per
- 16 100,000. And the natural average is somewhere around 80
- 17 per 100,000. Kauai is right up there, too, with -- I
- 18 think with 172 per 100,000.
- 19 MRSA started in hospitals. And because of
- 20 using various antibiotics improperly over time, the
- 21 bacteria became resistant until Vancomycin is now being
- 22 used as a prophylactic antibiotic in some hospitals for
- 23 surgery. Well, Vancomycin was referred to, 10 years
- ago, as a gorilla antibiotic that would kill anything.
- 25 Now we're risking losing that as an antibiotic that will

- 1 work against these things.
- 2 Now -- so you have the decline of the reef on
- 3 the one hand and you have the -- the human threat on the
- 4 other hand. The water that comes from that plant in
- 5 Lahaina exits very, very closely nearby, within half a
- 6 mile of Kahekili. And I'm sure there are other seeps up
- 7 closer to the plant itself. But the concentration of
- 8 the fresh water mingling with the saltwater along the
- 9 shoreline in very shallow water increases the amount of
- 10 nutrients that are being injected in that area. If the
- 11 -- if the pipe was out further in the water, say in 600
- 12 feet of water, maybe that would -- and nobody has talked
- 13 about that yet. But I -- I'm not sure it's a great
- idea. But if -- it seemed to me that if it was put
- 15 further offshore that might be helpful, especially if it
- 16 wasn't released directly on the ocean floor, because
- 17 there are flora and fauna on the shore. But if it was
- 18 at some level, 15, 20 feet above the ocean bottom, maybe
- 19 that might be a help. I don't know. That's my own
- 20 guess.
- 21 But the environment here in Hawaii -- so we
- have the reef itself and we have the human illness as
- 23 two big issues that have been talked about tonight. But
- 24 -- and, also, in essence, the environment in Hawaii for
- 25 most of the residents here is the economy. So when the

- 1 County talks about dollars and cents, they're really
- 2 talking about cutting off their nose to spite their
- 3 face. Because if you destroy the reefs -- if this is,
- 4 in fact, destroying the reefs -- and it seems that the
- 5 DAR has shown that -- that if you destroy the reefs, you
- 6 -- you detract from the tourist industry. If tourists
- 7 come and find out that they're gonna get staph from
- 8 going in the water, you're destroying the tourist
- 9 industry.
- 10 I can't agree more with Ke'eaumoku that this
- 11 is crazy. And it's -- it drives you nuts to think about
- 12 it.
- 13 So I think that we should do something. And I
- 14 -- I agree with the doctor here who said, obviously,
- 15 this can't be remedied overnight, but -- but there needs
- 16 to be some kind of conditional -- conditions --
- 17 conditional use permit, where things can improve over
- 18 time, hopefully rapidly.
- 19 And that's my own personal take on it. Thank
- 20 you.
- 21 (Applause.)
- MR. DAVID ALBRIGHT: Thank you.
- The next speaker is Elle Cochran.
- MS. ELLE COCHRAN: Good evening. My name is
- 25 Elle Cochran.

- 1 And thank you, Nancy, for hearing all our
- 2 testimonies and having this public hearing. I
- 3 appreciate you folks being here. I get to see a real
- 4 live EPA guy. You know, it sounds like such a big
- 5 entity. And thank you.
- 6 Hopefully, this will set precedence for us to
- 7 have a lot more interaction together. You know, I
- 8 believe in keeping public involved and educated on
- 9 issues is very, very important.
- 10 And that's one reason why DIRE, the group that
- 11 I am also with, had done that. And, also, we brought up
- all our major points, pretty much, through Hannah
- Bernard. So I don't want to sound redundant, but I
- believe it is very important that, eventually, we phase
- 15 out these injection wells. I mean, obviously, you've
- 16 been hearing over and over this evening the negative
- 17 impacts it has. There are definitely the studies to
- 18 prove that.
- 19 And, obviously, we can't just phase it out,
- 20 like Dr. Pang had mentioned. But, hopefully -- or
- 21 completely cut it out. But, hopefully, you know, phase
- 22 it out. And in the meantime, if we have to continue to
- use injection wells, to beef up the standards, get
- 24 stricter, you know, standards there, and make sure that
- 25 the injection wells comply with that.

- I don't want to knock our injection well
- peoples, Steve Beribacoli, Dave Taylor, everybody,
- 3 they're doing awesome work. You know, they are
- 4 following their standards. But right now, I feel they
- 5 aren't up to par. They need to be more strict. And,
- 6 you know, even, you heard that from Robin Knox's
- 7 testimonies and everything. So the scientific data is
- 8 there. And I would like to see that.
- 9 I know money is a really big issue with all of
- 10 this. To get UV treatment, you know, plants, to get
- 11 it -- even pure water, and the reuse and recycling, that
- is number one. But, again, you know, we need the
- 13 transmission lines to get it to where we can be reused.
- 14 And we don't have that right now. So we understand that
- 15 storage, that's a problem, too. So that's all going to
- 16 take money.
- 17 And, you know, the funding that the -- that
- 18 came from the government back in the early 1990s, I
- 19 guess, had put up all these treatment facilities
- 20 nationwide, and then they totally cut out funding. I
- 21 mean, that, to me, just doesn't make sense. You know, I
- 22 think they should have some kind of responsibility in
- 23 what happened here. You know, now we're suffering. I
- mean, our land, our sea, our people. You know, human
- 25 health is suffering because of what they had, actually,

- 1 you know, put into use.
- 2 So where is their accountability with all of
- 3 this, is what I would like to know? And, hopefully,
- 4 they can, you know, put up some funding, because that's
- 5 exactly the bottom line what's happening.
- So, you know, the reuse thing I think is very
- 7 important.
- 8 A lot of people spoke with restoring stream
- 9 flow -- stream flows. I'm a big advocate of that. I do
- 10 know that there is a agricultural -- well, there's a
- 11 company further north that has access to using this
- 12 recyclable water and they have denied use of it. It is
- one of their options, but because they divert the
- streams and get water for free, then why should they
- purchase water from the County?
- 16 So I believe I would like to see a mandate to
- 17 say -- require it for people who have even access to
- 18 those waters to actually use it, you know. So that is
- 19 something to, please, look into.
- 20 And, yes, you harm our environment, you know,
- 21 you're harming our economy. That's really the bottom
- 22 line.
- 23 And development. There's a lot more
- 24 development coming down the pipes right now. A lot of
- 25 us aren't very happy about that and will do all we can

- to, hopefully, stem it. But the truth is there will be
- 2 some. Why don't we somehow put in some kind of mandate
- 3 for these developers to put in that infrastructure to
- 4 use the recyclable water? You know, I mean, it's --
- 5 it's the price you pay to build here in paradise.
- 6 So somehow -- I don't know who is out there
- 7 listening, but I would like to just put the costs on the
- 8 developers. You know, I know the users will -- will
- 9 also have to pay. But I think, you know, the
- 10 majority -- it should be accordance -- the rates should
- 11 be in accordance to the usage. And a lot of these big
- timeshares with big ol' bathrooms and, you know,
- everything, they're using a lot of the water.
- 14 Personally, I live off the grid, so I'm not
- part of that system. But, you know, anyways, I just
- 16 want to thank everyone again for being here. And aloha.
- 17 (Applause.)
- 18 MR. DAVID ALBRIGHT: Thank you for those
- 19 comments.
- The next speaker is Meghan Dailer.
- 21 MS. MEGHAN DAILER: Hi. I am Megan Dailer.
- 22 And I represent the University of Hawaii.
- 23 Can you guys hear?
- MR. DAVID ALBRIGHT: Pull it up.
- MS. MEGHAN DAILER: Pull it up?

- 1 MR. DAVID ALBRIGHT: Pull it up.
- MS. MEGHAN DAILER: There, okay.
- 3
 I've submitted my testimony to you already
- 4 that's quite long. And I am not going to read any --
- 5 I'm just reading the summary from that.
- So, nuisance algal blooms consisting of red
- 7 alga Hypnea musciformis and the green alga Ulva fasciata
- 8 are problematic in shallow closer waters around
- 9 urbanized areas of Maui.
- 10 The Kahekili area is an area of problematic
- 11 algal growth, primarily of Ulva fasciata, but other
- 12 species at times, and substantial reef decline, which
- has already been mentioned. Kahekili has the highest
- 14 microagal N15 value on Maui. N15 signals that are high
- are indicative of sewage. So this indicates the
- 16 presence of sewage in the nearshore marine environment
- in the Kahekili area.
- 18 Sewage effluent contains elevated levels of
- 19 many nutrients compared to oceanic background levels,
- 20 some of which are important for algal growth and
- 21 photosynthetic needs.
- 22 From laboratory studies with reagent grade
- 23 nutrient enrichments, we see that nitrogen and
- 24 phosphorous play important roles in the photosynthetic
- 25 needs of Hypnea musciformis, but are unable to promote

- 1 excessive growth on their own. They need more than just
- 2 nitrogen and phosphorous to grow.
- 3 Our sewage effluent addition experiments
- 4 resulted in growth rates similar to those observed in
- 5 bloom situations for both Hypnea musciformis and Ulva
- 6 fasciata, which were significantly higher with
- 7 increasing levels of sewage effluent. Whereas no
- 8 significant difference was found between treatment for
- 9 Acanthophora spicifera and other blooming species here
- in the islands that's also invasive, or Dictyota
- 11 acutiloba. Anyway, another native plant that is common
- to reef flats everywhere in Hawaii.
- Therefore, in terms of growth, Hypnea
- 14 musciformis and Ulva fasciata, primary -- respond --
- 15 similarly respond to excess nutrients more positive and
- 16 faster than A. spicifera and Dictyota.
- 17 Additional results from the sewage effluent
- 18 additions, were that Ulva fasciata requires fewer
- 19 nutrients to increase photosynthetic performance. So --
- anyway, than what is required for H. musciformis and A.
- 21 spicifera. All three species, except for Dictyota,
- 22 positively respond to excess nutrients in terms of
- 23 building photosynthetic capacity. And Ulva fasciata is
- 24 the most responsive.
- The last conclusion here is that the native,

- 1 the non-blooming reef plant, Dictyota, does not enhance
- 2 photosynthetic properties in the presence of elevated
- 3 nutrients.
- 4 From another aspect of this study where we did
- 5 a nutrient uptake rate determination, we see that
- 6 substantial decreases in nitrogen, phosphorous, iron,
- 7 molybdenum and manganese were found over a 24-hour
- 8 period in the Hypnea musciformis experiment, which
- 9 displays the ability of the species to utilize
- 10 substantial levels of these nutrients in a short amount
- of time.
- 12 In addition, these experiments present the
- importance of considering more stringent limits on the
- total allowable daily loads of algal-promoting macro and
- 15 micronutrients such as manganese, total nitrogen, total
- 16 phosphorous, iron and molybdenum.
- 17 (Applause.)
- 18 MR. DAVID ALBRIGHT: Thank you for those
- 19 comments.
- The next speaker is Daniel Palakiko.
- 21 MR. DANIEL PALAKIKO: Thank you guys for
- 22 coming and listening to our testimony.
- I don't come here with written testimony. I
- don't come with high-ranking positions in an
- 25 organization. I come as a concerned person about the

- 1 way our water has been -- is being used.
- 2 First of all, I believe that nature takes care
- 3 of itself, that God created this earth in such a way
- 4 that, if something happens, it will take care of itself.
- 5 It's man that is the trouble. There is a process that
- 6 God has put into play where the water comes from the
- 7 cloud, gets on there, on the ground, it gathers and it
- 8 soaks down and, on the way down, it clears. Man comes
- 9 along, drills a well, takes the shortcut, and tells me,
- 10 from other people, that you can drink the water. Well,
- 11 if you want to drink the water, drink it. Not me. I
- 12 want the surface water.
- 13 You guys say the water is clean -- they say
- the water is clean enough to drink. Well, I don't
- 15 believe the County.
- So many things that's happening in the State
- 17 and in the County. And I been fighting with the County
- 18 because of our place, where I don't believe them
- 19 anymore. They say it's safe, but I seen. I come with
- observation from what I've seen since they started these
- 21 injection wells.
- I was sitting at a cliff one day and looking
- down and enjoying myself. Then I see a turtle coming up
- 24 with (Hawaiian) on it. You know what the (Hawaiian) is?
- 25 Tumors. It's terrible.

- 1 I've seen the fish dwindle. I've seen the
- 2 limu disappear.
- 3 I don't have to be a rocket scientist to know
- 4 that something is happening. And then there's a algae
- 5 bloom. Then there's a study where they say they gonna
- 6 put a dye, so they gonna watch the dye, where the dye
- 7 goes, but it's inclusive. Well, nature is taking its
- 8 taking care of itself. It's gonna drift from there to
- 9 there. The dye is not gonna be there. It's gonna be
- 10 cleaned out. Common sense will tell you.
- 11 The County spends money. County says we own
- 12 the water, the wastewater, because the -- the money is
- 13 spent for cleaning it. Well, the County is wrong. We
- 14 owned the water before had doodoo inside. That's the
- 15 public trust. And now they tell, we own the wastewater?
- 16 We owned the water from the beginning. Not because the
- money was spent, but because it's a public trust.
- I say -- drilling a well, last I heard was
- 19 \$100 a foot, 300 feet you gotta drill. That's a lot of
- 20 money. I say let nature takes its course. If you can't
- 21 get rid of the water that they clean, go and make
- 22 reservoirs, put the water inside, let the sun evaporate
- it, let it sit through and let nature takes its course.
- Then I believe, then, it's clean, I can drink the water.
- 25 But to tell me you're gonna take a shortcut

- down there and you -- you don't know where the water
- goes. We see the ocean, what's happening to the ocean.
- 3 So for me, I say don't give 'em the permit
- 4 until such time as the County catches up with the
- 5 infrastructure. Why continue getting more
- 6 rubbing-stamping permits which we are against? And then
- 7 when all the doodoo come, it's our water?
- 8 Come on, you guys. That's -- let's wake up.
- 9 You know, I told many people, when it comes to
- 10 water, you guys gonna hear my anger. You guys are
- 11 hearing my anger in my voice. Usually, I'm a nice guy.
- But water is the essence of life. So today, I'm not the
- 13 nice guy. I got anger in me because of all the times --
- 14 I live next to river. And then you have somebody for a
- 15 million come and tell me what happens to the river.
- 16 Come on. He's not there when there's a storm and big
- boulders as big as a Volkswagen rolls on and hits
- another one and shake your house. I'm there. If you
- 19 guys want some input, get the people, the grass roots,
- 20 not the guys with all the studies, with all the
- 21 sophistics.
- 22 Go with observations. Man has came a long way
- 23 through observation. So I say maka'ala, use your eyes,
- use your common sense, deny the permit. Amen.
- 25 (Applause.)

- 1 MR. DAVID ALBRIGHT: Thank you for your
- 2 comments.
- 3 The next speaker is David Hartley.
- 4 MR. DAVID HARTLEY: My name is David Hartley.
- 5 I'm a resident on the west side. And I retired, but I
- 6 have had over 45 years of experience in financing public
- 7 infrastructure throughout the western part of the United
- 8 States, particularly California.
- 9 This hearing is excellent, listening to these
- 10 people and their concerns. The injection system, I
- 11 think, is understood by most of us not to be the best
- 12 way to do this. There are other procedures, there are
- other alternatives that should be explored. And I think
- it should be the responsibility of the County, together
- with the EPA, giving conditions to any permits, that
- 16 they undertake immediate action -- that's difficult on
- 17 Maui -- to undertake a plan looking at alternatives to
- how to finance, other than an injection system, to keep
- 19 the water so it's -- can be used, particularly gray
- water. We're using entirely too much potable water on
- 21 this island for purposes of irrigation. And it's not
- 22 necessary. If you're getting five and six million
- gallons a day out of a sewage treatment facility, there
- are ways to create infrastructure systems to put this
- 25 water into an irrigation system for the entire west side

- of this island, certainly this side, Lahaina, north and
- 2 south. And there are financing procedures available.
- 3 There sits in the County now, sitting, getting
- 4 dust on their desks, a procedure under which long-term
- financing could be done for this particular area, which
- 6 is the benefit area. And the people who are using the
- 7 toilets and who are using and producing the sewage
- 8 should pay on the basis of what they're doing and what
- 9 the gallons are that they are putting into the system.
- 10 And everybody could take responsibility to
- 11 step up to the plate, the County Council first, and the
- 12 people behind it, to stand up, take responsibility and
- pay their fair, just and equitable share of assisting.
- Because we are not gonna get it from Uncle Sam and we
- 15 are not gonna get it from the State. But we can do it
- 16 ourselves, if we choose to and if we have the political
- 17 will.
- Thank you.
- 19 (Applause.)
- MR. DAVID ALBRIGHT: Thank you for your
- 21 comments.
- The next speaker is Gordon Clay.
- 23 MR. GORDON CLAY: I guess everybody can wait
- to hear me and not go home.
- 25 I would like to thank you all for coming here.

- 2 saying already, so I am going to keep it brief.
- I came to Maui a year ago to live, after being
- 4 away for 15 years. I consider myself to be a guest
- 5 here.
- 6 The reason I'm here tonight is, basically,
- 7 three reasons.
- 8 Number one, I was absolutely shocked to see
- 9 the degradation of the reefs compared to how I remember
- 10 them from 15 years ago. I spent most of my recreation
- 11 time snorkeling on this side of the island.
- 12 And number two, I took a course, through the
- 13 Maui Reef Fund, on reef awareness. And I'm not a
- 14 scientist, but I am not stupid, either. And what I
- 15 learned in that course was shocking, absolutely
- 16 shocking, to me, as an outsider looking at something
- 17 with clear eyes, that this can be allowed to occur.
- 18 And the third reason I'm here is because I
- 19 know that switching from putting sewage into water
- 20 bodies, whether they're lakes, rivers or oceans, and
- 21 using them for irrigation works. It's very
- 22 cost-effective and it's very doable. I have seen it in
- 23 my lifetime in several places.
- I, also, in most of my adult life, have been
- 25 involved in environmental remediation work. I have

- 1 watched species go extinct. I have watched reefs. I
- was in Florida just earlier this year. I have seen
- 3 reefs that have collapsed. That can happen. It will
- 4 happen if nothing is done. And they don't come back
- 5 very fast.
- On the positive note, I have seen a lake that
- 7 I grew up near go from being an algae-filled, green,
- 8 cloudy mess that you wouldn't want to go near, and stink
- 9 because of sewage, treated sewage, being put into it,
- 10 transformed into a healthy, vibrant, essential part of
- 11 both the tourism and domestic, you know, local
- 12 community. And that's Okanagan Lake in British
- 13 Columbia.
- Now, I ask you, as, you know, people who I
- 15 believe are well-intended and trying to do the best you
- 16 can do, to meet your responsibilities.
- 17 I don't know. Is there any elected officials
- here tonight? No. Where are they?
- 19 To communicate the facts, the truth, the
- 20 common sense of what needs to be done -- okay. If I do
- 21 the math correctly, where I live, paying a very low
- 22 rate, we pay \$3 per 1,000 gallons of fresh water. Okay.
- 23 At five million gallons a day, that translates into
- 24 about \$50 million over the life of this permit. If you
- assume that all of that fresh water that's being used

- 1 for irrigation can be used for potable purposes in a
- 2 place where there's people waiting for water, you know,
- 3 I mean, it's just -- it is common sense.
- 4 The final thing I have to say is that for
- 5 those who, you know, don't want this permit to be
- 6 approved for a 10-year period, but would agree to a
- 7 highly conditionalized annual renewal process that
- 8 ensures the public continued input into the solution to
- 9 the problem. And, again, the solution is very
- 10 achievable. We've heard that here tonight. Is that --
- 11 I have here the Hawaii Environmental Law Handbook. I am
- 12 sure at least one of you is familiar with it. And the
- 13 law is on our side. Everything in this book that I am
- 14 newly acquainted with -- and I am not a lawyer -- tells
- 15 me that the solution is available to the public if we
- 16 don't fail.
- 17 Thank you.
- 18 (Applause.)
- 19 MR. DAVID ALBRIGHT: Thank you for your
- 20 comments.
- 21 The next speaker is Ed Lindsey.
- 22 MR. ED LINDSEY: Aloha. My name is Edward
- 23 Robert (Hawaiian) Lindsey. I represent the Maui Nui
- 24 Marine Resource Council. I also represent the kupunas
- 25 who have lived here for over 1,000 years. I am a living

- 1 representative of their voice.
- 2 (Hawaiian.) We're killing ourselves.
- I have a prepared text, but I would like to
- 4 preface it in what Western technology is doing to us.
- 5 The Kumulipo, the Creation Chant, coming from the
- 6 darkness, and going on into the darkness, the first
- 7 thing to have been created was the coral. And all
- 8 things from the ocean had been created long before man.
- 9 The fish was created, the limu was created, the sea
- 10 mammals were created, and still man had not been
- 11 created.
- 12 The first plant to get onto land is called
- akahi akahi, that's number one, number one. And then
- the things from the plants were created, the insects,
- the birds -- and there's one insect here -- have been
- 16 created, but not man.
- 17 After everything had been finished and had
- been created, then man was created. And man was created
- 19 to use all of the resources to sustain himself. But as
- we go along, and as we become more populated, we have
- 21 such things as these injection wells.
- 22 So what is happening to us? We are killing
- 23 the corals. We are killing the animals in the water.
- 24 And the secret that nobody has really
- 25 acknowledged yet is that we, according to the Kumulipo,

- 1 are related to the coral and everything that had been
- 2 created before humankind. So we have a responsibility
- 3 not only to ourselves but to all things that God had
- 4 created.
- 5 When you cry, the tears are salty. Evidence
- 6 that we came from the ocean.
- 7 What we need to do is to become smarter and to
- 8 use the technology that God has given us to clean up our
- 9 act. The current system does not provide for
- 10 sustainable living.
- 11 Maui, most recently, had been elected,
- 12 so-called, if there's such a thing, as the best island
- in the world. But don't go back out and tell 'em all
- secret, we have poo-poo problems.
- 15 You know, the prepared speech had been already
- 16 turned in. And so as a chairperson to the Maui Nui
- 17 Marine Resource Council, I would like to read parts of
- it with your permission.
- 19 The Maui Nui Marine Resource Council is a
- 20 broad-based community group, working to apply ecological
- 21 principles to education, research and agency management
- such as this so that our nearshore waters will be
- 23 restored with an abundance of fish, healthy corals,
- 24 avoid algae bloom.
- I took my grandson out to the ocean to

- 1 introduce him to his family, the fish and the corals,
- 2 that my dad had put out what we Hawaiians call koa. The
- 3 Hawaiian word for coral is koa. When you have a fishing
- 4 koa, that means this is where the fish gather.
- 5 (Hawaiian) means to gather over here. A fishing koa is
- 6 a practice, cultural practice, to bring the fish in.
- 7 And then I took him out, there was no fish. I took him
- 8 out -- he is a four-year-old little boy. I took him out
- 9 to introduce him to the limu. I found only weeds that
- 10 they call invasive limu.
- 11 So these things are really impacting not only
- our culture, but our souls.
- There is no time to get angry. We must act.
- When the ship is sinking, you don't discuss false
- 15 scientific evidence. You go out and do the work that
- 16 needs to be done.
- 17 Our coral reefs are sinking. We don't have
- 18 time for anything else.
- 19 And to do purpose, credibility to the Maui Nui
- 20 Marine Resource Council, I would like to read the
- 21 recommendations. We ask that your permit include
- 22 conditions to protect our groundwater sources for
- drinking water use and all aquatic ecosystems that
- 24 support cultural fishing and recreation. We ask that
- 25 you specifically include water-quality-based permit

- limits designed to achieve compliance with surface water
- 2 quality standards in the coastal waters.
- 3 You know, if you walk down the seashore, you
- 4 can feel -- if you walk in the sand, you can feel cold
- 5 water coming -- seeping out from under the sand. But
- 6 sometimes, some places that's, also, drinking water.
- 7 Some animals on Lana'i, where the spring water is still
- 8 going out into the ocean, you see the animals going out,
- 9 the deer, and what used to be cattle before, and some of
- 10 the goats went out into the water. And they know where
- 11 the seepages are coming through and they drinking that
- 12 water.
- 13 So guess what our injection wells are doing?
- We ask that the permit be required to comply
- 15 with any total maximum daily loads established to
- 16 support attaining water quality standards. I don't know
- if the total maximum daily loads have been established
- 18 or not.
- 19 And the fourth one we ask is that the EPA
- 20 address comprehensive watershed planning -- let me
- 21 repeat that, comprehensive watershed planning -- to
- 22 ensure that this and all decisions support clean and
- 23 healthy nearshores waters that we and our visitors and
- 24 our (Hawaiian) can fish or swim with no concern for
- 25 health hazards.

- 1 Currently, it is paramount that solutions are
- 2 beneficial to all concerned. Currently, there are
- 3 people on the West Coast who are finding pathogens are
- 4 impinging on the swimming population on California. We
- 5 have some friends who are doing that kind of work. And
- they are amazed and they're very concerned that we don't
- 7 have this thing going on over here on Maui.
- 8 And with that, I thank you for coming. And I
- 9 bid you aloha. And let's get things done.
- 10 (Applause.)
- 11 MR. DAVID ALBRIGHT: Thank you for those
- 12 comments.
- 13 The next speaker is Alan Arakawa.
- MR. ALAN ARAKAWA: Good evening. And thank
- 15 you very much for having this hearing here at Lahaina.
- As a former mayor of Maui County, I also was a
- 17 former wastewater operator and supervisor at the Kahului
- 18 Treatment Plant. And I worked at Kahului, Lahaina and
- 19 Kihei Wastewater Treatment Plants.
- One of the things that you should be looking
- 21 at is the fact that division is entitled Wastewater
- 22 Reclamation Division. The very purpose of the Division
- is to take the water, reclaim it so that we can have
- 24 reuse.
- Now, early on, when the treatment plants were

- 1 created, there was very little scientific data that was
- 2 available because no one was doing baseline studies of
- 3 how the oceans were being affected, no one was doing
- 4 studies on exactly what the cause and effects are.
- 5 When you look at the Lahaina Treatment Plant
- 6 and the Kahului Treatment Plant, the effluent is very
- 7 close, the wells are very close to the ocean. They are
- 8 not miles above the ocean; they're hundreds of yards
- 9 above the ocean. And I think that you will find that
- 10 the water that's going from the treatment plant, going
- into the ocean, is probably getting there a lot sooner
- than most people think. Even though there's no
- definitive scientific proof, there's a common sense
- 14 application of that.
- 15 I know that, in Kahului, the water goes into
- the injection well, it comes out almost immediately at
- 17 the ocean side. We can even see traces of it bubbling
- 18 up almost as a stream.
- 19 In Lahaina, we're not much further. I believe
- 20 the effects of the water getting into the ocean is a lot
- 21 sooner than what we think.
- Okay. That being said, there's also a severe
- 23 water shortage problem that the Water Department of the
- 24 County is having to go through. So you have to balance
- off what are the community needs. The community needs

- 1 to have more water availability. We cannot continuously
- dilute streams to get more water. So it makes sense --
- 3 and a lot of speakers have pointed this out -- that we
- 4 start to reuse and make it a requirement to reuse water
- 5 that we have available that can be used in the proper
- 6 way, like for irrigation.
- 7 It's a question of cost. And when we start
- 8 talking about cost, we also have to talk about the
- 9 deferred cost from having to deal with many of the
- 10 things that we do not know what is occurring. You had
- 11 Department speak to you representing the State,
- 12 representing the University, you've had scientists
- 13 talking to you about different effects on the ocean
- life, what studies they have. At the same time, you
- 15 have heard that there is no definitive study that the
- 16 County is using or can look at and say there is no
- 17 problem that is occurring because there are no
- 18 scientific studies that can back that up.
- 19 I think you have a very clear mandate with
- what is available to seriously consider banning the
- 21 injection well use and start doing things to clean up
- that water so that it's actually much cleaner and you
- have much better tracking system for it.
- Now, you cannot do it overnight. As Dr. Pang
- 25 was pointing out, perhaps we need to be able to step it

- 1 so that it's a requirement that is met, you know,
- 2 periodic improvements, so every year, so many percent of
- 3 it has to be reused, and get away from the injection
- 4 wells altogether.
- Now, there's also a couple of other things
- 6 that need to be considered when you're -- when you're
- 7 looking at this. If the Water Department is having to
- 8 go through the cost of looking for water and providing
- 9 water for the community, some of those costs could be
- 10 deferred into the wastewater treatment system to be able
- 11 to get water that's readily available, and substitute
- that water for drinking water that's being used for
- 13 irrigation and other -- other kinds of uses like that.
- So you would be trading one cost for another
- 15 cost. So it might become more cost-effective. That's
- something that needs to be looked at.
- 17 But if it's not mandated, if it's not mandated
- as a condition, it will probably not happen. And you,
- 19 as administrators of this system, really need to look at
- are we gonna be responsible, later on, for trying to
- 21 work on tumors that the fish life have or possibly other
- 22 kinds of consequences that we really don't have any
- 23 scientific basis to say is not occurring, when all the
- 24 scientists that have spoken to you are saying that there
- is a challenge that is occurring and they're seeing

- definite problems that are arising that are changing the
- 2 environment?
- I think the evidence is overwhelming that
- 4 something needs to be done to make sure that we are on
- 5 the right side of the scientific evidence. And that is
- 6 seeing what is occurring, taking that as a reality and
- 7 recognizing what we don't have as information and taking
- 8 that as a reality as well.
- 9 I'd like to recommend that we really start
- 10 looking at this, as you start mandating. And as Dave
- 11 Taylor pointed out, if you start mandating that the
- 12 County has to be able to start changing systems, going
- to total reuse, then the budget has to be altered to
- 14 require that.
- 15 There are many conflicting areas in trying to
- 16 get the financing done. There are a lot of water that
- 17 have been very inexpensively used in the area -- the
- agricultural area in the past. But the competition for
- 19 that water, now that the cane fields and the pineapple
- fields seem to be disappearing, should also be altered
- 21 so that more water are returned to the streams, more
- 22 water are left in the natural habitats, so we are not
- 23 diluting a lot of these areas. And the areas of water
- 24 where we're wasting, such as the reused water, should be
- 25 applied to make it balance out a little better. And you

- 1 have it within your control to be able to do this in
- 2 your permitting process.
- 3 I'd also like to recommend that -- when you
- 4 start doing this, that baseline studies be required, you
- 5 know, to -- to track what is happening.
- Now, when Wendy Wiltsie came here in the early
- 7 1990s, I was working in wastewater. And we actually
- 8 started the discussion on doing tracking studies as to
- 9 what's happening in the ocean. And many of these
- 10 scientists that are talking to you today are starting to
- 11 do a lot of that tracking, which is why they can see the
- reef degradation, which is why they can now tell you
- about the fish population changing, or the algae
- 14 population growth changing, because that scientific
- 15 background is there, it's being accumulated, where there
- 16 was nothing when we first started the injection well.
- 17 And I think that -- that scientific evidence is
- overwhelming and you really need to consider that
- 19 strongly.
- 20 It's not a question in -- in my mind, it's not
- 21 a question for you to have to decide what the costs are
- or whether it's going to take a lot of money to do it or
- 23 not do it. I think, in my mind, your decision is, is
- 24 the scientific evidence that is available showing that
- there could be much more damage by not requiring the

- 1 reuse and not requiring the change of the system from
- 2 injection well to total reuse. Is that damage much more
- 3 pressing than allowing the cheaper, less expensive way
- 4 of disposing of water? I think that is the question
- 5 that you have to decide as administrators of this.
- 6 And are you protecting the public health,
- 7 safety, welfare and quality of life, when you -- when
- 8 this is showing that there's a lot of degradation, and
- 9 the quality of life is degradating [sic]. You
- 10 protecting that to the level that it should be versus
- 11 just allowing a cheaper way to drop water away from the
- 12 site and not have to deal with it?
- 13 From a practical standpoint, if you require
- 14 reuse -- if there are any kind of accidents that happen
- or upsets within the system, 100 percent reuse will
- 16 require that some kind of treatment be made and not just
- disposed of in the wells, never to be seen again. It
- will require much more and better management by the
- 19 County in how they run the systems. But then shouldn't
- 20 that be what it -- is being required?
- 21 You know, as we advance scientifically, we
- 22 have to start advancing the way we handle our treatment
- 23 systems and the way we handle the response to the
- 24 public.
- 25 So I thank you very much for your time. I

- 1 hope you take this into consideration. And I would
- 2 recommend that you make very decisive measures,
- 3 requirements within your recommendations of how you're
- 4 going to allow the injection wells to continue or not
- 5 continue. Thank you.
- 6 (Applause.)
- 7 MR. DAVID ALBRIGHT: I am going to ask that we
- 8 take a very short break, say three minutes, and then
- 9 we'll resume with the next speaker.
- 10 (Recess, 8:16 p.m. to 8:24 p.m.)
- 11 MR. DAVID ALBRIGHT: Okay. I think we're
- 12 ready to get started again. If you can take your seats,
- 13 please. If we could get started again, please, in the
- interest of time, I know we want to hear from all the
- people who have signed up to speak.
- Okay. I would like to call the next speaker
- 17 up. And that is Tamara Paltin. Thank you.
- 18 MS. TAMARA PALTIN: Hi. My name is Tamara
- 19 Paltin. I'm here representing myself. And I also
- 20 belong to a couple environmental organizations -- I also
- 21 belong to a couple organizations. And I work at the
- 22 beach as a lifeguard, too.
- 23 So just kind of saying like we heard over like
- 24 couple hours of testimony. And pretty much nobody asked
- 25 you to approve the permit. So I just was -- wanted to

- 1 point that out.
- 2 But, seriously, that us guys that live in the
- 3 ocean and have to work in the ocean and things like
- 4 that, we hear all of the studies of Meghan Dailer and
- 5 Robin Knox. And that's why I came over here today, just
- 6 to like ask your guys' help to help our County.
- None of the elected officials are here today,
- 8 but if you deny the permit, then they'll have to fall in
- 9 line because that's the law. Right? So just pretty
- 10 much just asking your help, if you can help us out, to
- 11 deny the permit. Or at least do what the people
- 12 suggested, you know, like to set up a process by which
- we can eventually phase out of injection wells. Because
- 14 like the former mayor and everybody else was saying, it
- 15 just makes sense, it's logical. We need water and we're
- 16 dumping it into the ocean. And it's kind of messing up
- 17 the system. And people are getting all kind of diseases
- 18 and things like that.
- 19 Like us guys that are right there on the
- 20 beach, we see it more than, I think, someone sitting in
- 21 the office. And it's true. And I just hope that you
- 22 would listen to everybody and follow the community
- 23 wishes and help us to let the Council see the light, at
- 24 least. It's one of the most important issues facing
- 25 Maui, is water, natural water, how we deal with our

- 1 wastewater. It's all kind of interconnected. And if
- you can help us out and deny the permit, then they'll
- 3 have to fall in line. That's just the way I feel like.
- 4 And thanks for coming here and listening to
- 5 us.
- 6 (Applause.)
- 7 MR. DAVID ALBRIGHT: Thank you for your
- 8 comments.
- 9 The next speaker is Lucienne deNaie.
- 10 MS. LUCIENNE deNAIE: Aloha, everyone. My
- 11 name is Lucienne deNaie. I am the Chairperson of the
- 12 Sierra Club, Hawaii Chapter. That's the statewide
- 13 Sierra Club. But I live here on Maui. And I'm here
- offering comments on behalf of the Sierra Club, Maui
- 15 Group.
- We are really, really happy that you folks
- 17 have come here. You can see the need. And you can see
- how much we are looking forward to having both our local
- 19 and our Federal regulations move us all forward here.
- 20 We really need to not let the same thing happen on our
- 21 watch that's been happening the last 15 years.
- 22 You know, over the years, the Sierra Club here
- in Hawaii has had a long history of weighing in on
- 24 wastewater facilities. In fact, we just settled a
- lawsuit in Honolulu for their improper dumping of

- 1 sewage. And our settlement said, you know, don't give
- 2 us any money, fix the problem. We're solution-oriented.
- Here on Maui, we've weighed in on this
- 4 particular facility, oh, for over a decade. And our
- 5 members have expressed concern about the continued
- 6 degradation of the nearby reefs, the marine life habitat
- 7 and the marine water quality in this area that is just
- 8 ocean side of the injection wells. We call it North
- 9 Beach, this area, Kaanapali, North Beach, Honokowai.
- 10 It's -- it's really a very popular area. It's very
- 11 culturally significant. And it's a place a lot of folks
- go to fish, to swim, to dive, to go surfing. So folks
- spend time in this water. And we need those waters to
- 14 be healthy.
- 15 And right now, the situation that we have with
- 16 the level of treatment that's going in there from the
- injection wells, as well as the onslaught of new sewage
- that's gonna be generated by all the developments
- 19 surrounding here, it's just a recipe for disaster. Now
- 20 is the time to act.
- During the last decade, our members have
- 22 reported, you know, to us, through letters, through
- 23 attending meetings -- we have a yearly meeting, we have
- 24 breakout groups and things like water quality and things
- like, you know, ocean access. And we have folks talking

- 1 about the shocking decrease in native fish species,
- 2 especially in the West Maui area, and especially in that
- 3 general area, all along the developed part of Kaanapali.
- 4 Also, the degradation of the living coral formations and
- 5 the mats of algae that people are seeing. We have folks
- 6 that email us photos, "You're the Sierra Club, what are
- 7 you going to do," like we're the government. But, you
- 8 know -- so we're here talking to the government. That's
- 9 what we're gonna do.
- 10 We have many members who regularly have
- 11 recreational activities in these waters. They fish
- 12 there. They go boating. They -- you know, they
- 13 snorkel. And some have even reported an increase in
- infections, you know, like Wayne was speaking of,
- 15 Mr. Cochran. That it's just hard to feel that these
- 16 waters are clean now. They -- they can't like carry the
- 17 load of what is going into them.
- So these things are all happening because we
- 19 are not having the right balance in how we're treating
- our oceans in these highly urbanized areas.
- 21 So we would really like to find a better
- 22 solution. Our Sierra Club volunteers have addressed
- this over the years. They, actually, have strongly
- 24 supported the land-based reuse of this reclaimed water,
- 25 long before it was popular. You know, at least 10 years

- 1 ago, folks were advocating for this.
- 2 When Wendy Wiltsie was here and working with
- 3 the EPA, we attended, you know, some of her groups. And
- 4 we were told, yeah, yeah, yeah, you know, less is going
- 5 to happen. And Steve Beribacoli, bless his soul, has
- done a wonderful job. And our wastewater treatment
- 7 operators, they're all behind this, too. It just seems
- 8 to be that, you know, it's all about money. So --
- 9 But in the early nineties, when the EPA issued
- 10 a permit for this same facility, you know, the County
- 11 was asked to reduce the nitrogen levels and to begin to
- 12 use the wastewater for irrigation rather than injection.
- 13 And we testified at that time. And we said that we
- 14 thought there was a very strong connection between the
- 15 injected effluent and the algae that was growing on the
- reefs, which was, you know, the reason Wendy was here,
- 17 because of all these algae. And we were told that no,
- no, no, there's studies that prove it isn't true and so
- 19 forth.
- 20 Well, we're like all the other people, common
- 21 sense doesn't tell you that. You know, this didn't used
- to happen, it's happening now, it has to be connected,
- 23 what's going on. And, of course, there are more recent
- 24 studies that finally are linking these two.
- 25 And we realized that we really can't just kind

- of wait for more studies to prove more things. Everyone
- who said that is absolutely right. It's time to like
- 3 have progress and have, you know, a real timetable for
- 4 getting something done.
- 5 Because we're hampered by the political will
- 6 to find the funding for the necessary pipelines and
- 7 storage areas and distribution infrastructure, we feel
- 8 that you folks have a role to play. And as folks have
- 9 said, you know, in your permit review, if you can help
- 10 put the pressure on that this is a condition of any
- 11 permit, that we need to actually have a real timetable
- 12 to redirect from the injection wells and get this water
- out into a land-based use where it's desperately needed.
- 14
 I just want to give you example, you know,
- 15 about how hard it can be to accomplish this, you know,
- from a citizen level. About four or five years ago,
- 17 Sierra Club members, myself included, testified in our
- 18 State Land Commission, Land Use Commission, at our
- 19 County Planning Commission, and we advocated that these
- 20 commissions would impose conditions on a large proposed
- 21 luxury development in Kapalua, just north of the --
- 22 where the treatment plant and everything is. And these
- 23 conditions that we asked for would have required the
- 24 development to extend reclaimed water lines when it
- 25 installed its sewage hookup lines. We thought, hey, you

- get one trench, you know, just put in two pipes, one one
- 2 way, one the other. And this would have allowed the use
- of several million gallons or more of the R-1 effluent
- 4 from the Lahaina Wastewater Facility.
- 5 This resort has extensive golf courses and
- 6 lush landscaping. Well, these folks were proposing over
- 7 600 new multi-million-dollar residences. And, yet, they
- 8 couldn't afford this onetime investment. And no one
- 9 would require them to afford it.
- 10 It was very frustrating because, you know, you
- 11 have folks say, well, development should pay for this,
- 12 you know, they have impacts, they need to be part of the
- 13 solution, but we don't have the backbone here to make
- 14 that happen.
- 15 I went to three Land Use Commission meetings.
- 16 I had to drive all the way here. I live 100 miles from
- 17 here, round trip. But it was worth it to try to have
- something happen. Instead, these developers were
- 19 allowed to continue bleeding the waters of Honokohau
- 20 Stream that are really needed to have healthy stream
- 21 life, simply because it's cheap water.
- 22 So, you know, we need to make it possible to
- 23 use the effluent well and use it to replace our fresh
- 24 water supplies, to use it to replace our potable water
- 25 supplies. But this ain't gonna happen by just kind of

- 1 business as usual.
- 2 So we are very happy that you are here. It
- 3 makes ecological sense to start reusing as much water as
- 4 possible.
- I am a water junkie. You know, I've studied
- 6 water resources here for the last five years. Our
- 7 rainfall levels have fallen to record lows throughout
- 8 West Maui. We really need to use and reuse every drop
- 9 of water that is, you know, coming into the public
- 10 system. And, yet, we are, instead, sending it out in
- 11 the ocean where it's impairing our ocean waters.
- So, please, we are asking of you to put
- conditions on this permit which will result in a
- timetable and help create a Federal/local partnership to
- 15 provide the infrastructure solutions for redistribution
- 16 of all of the reclaimed water for the Lahaina Treatment
- 17 Facility to land-based uses.
- 18 We also request that the EPA ensure compliance
- 19 with its own Clean Water Act standards, which we do not
- feel are really being met right now, by phasing out the
- 21 use of the Lahaina Wastewater Facility injection wells
- 22 except in emergency situations. And we feel that, you
- 23 know, with the new Administration, there is going to be
- an interest in supporting communities to find ways to
- 25 improve their own infrastructure, instead of throwing

- this money down a rathole in Iraq, pardon my political
- leanings here. But we need to find a way to keep this
- 3 multi-million-dollar resource, our coastal areas, which
- 4 are valuable to Hawaiian culture, which are valuable to
- 5 our people, and which are the basis of our
- 6 resort-oriented economy, we need to keep it healthy.
- 7 And we need you to take a hard line here.
- 8 So thank you for helping us. Aloha.
- 9 (Applause.)
- 10 MR. DAVID ALBRIGHT: Thank you for those
- 11 comments.
- 12 The next speaker is Kai Nishiki.
- 13 MS. KAI NISHIKI: Aloha, you guys. Thanks for
- 14 coming over and listening to the concerns of the
- 15 community.
- And I also want to say thank you very much to
- 17 our wastewater treatment facility operators. They do a
- great job every day with equipment and technology that
- 19 they have available to them.
- 20 Because of overdevelopment, we can barely even
- 21 see the ocean when we're driving. And it has also
- 22 impacted our coastal access. And, lastly, our water
- 23 quality has been diminished.
- 24 We have all these studies and we have the
- 25 observations and the experiences of our people. And I

- 1 think that those experiences and observations should
- 2 hold just as much water as the studies do. Pardon the
- 3 pun. But we don't really need to have these studies to
- 4 see what the negative effects are.
- 5 And I hope that you will consider those
- 6 observances and experiences of our people with as much
- 7 weight.
- 8 We can see that there's extreme damage
- 9 happening. And how can you put a price on the ocean,
- 10 the reef, and the native people who rely on those
- 11 resources? We really need the infrastructure to reuse
- 12 the water. And we are hoping and asking for your help
- to make it a mandate that they must phase out the use of
- 14 injection wells. We can see that they are just
- 15 unnecessary and that we could be reusing this water.
- 16 And, also, for the reuse of -- of gray water
- 17 and water catchment, that lessens the impact of -- or
- lessens the impact on our water treatment facilities.
- 19 So we need a lot of things to be done here.
- 20 And this is a first step. So we just ask you to please
- 21 phase out the use of injection wells and put conditions
- on the permit that will -- will allow us to do that.
- Thank you very much.
- 24 (Applause.)
- MR. DAVID ALBRIGHT: Thank you.

- 1 The next speaker is Uilani Kapu.
- MS. UILANI KAPU: Good evening. My name is
- 3 Uilani Kapu.
- 4 You have heard everybody, so I won't -- I
- 5 looked at the time and it was 8:30 already, so it must
- 6 be going on to 9:00. You guys have been here for so
- 7 long. The community has spoken out.
- 8 We need to reuse our waters. I am a living
- 9 testimony to having staph twice from our oceans out
- 10 here. I got infected from these waters. My kids don't
- 11 go into 'em anymore because of how many people have
- 12 caughten staph, algae bloom and everything.
- 13 Everybody has testified to you folks on behalf
- of all of the studies that has been done in Kahekili.
- 15 It has been going on around our whole island.
- 16 We live on an island. We need to protect what we have
- 17 here.
- 18 Everybody has spoken out. I don't want to
- 19 repeat anybody. So do the right thing, you folks are
- 20 here for it, community has spoken.
- 21 Mahalo.
- 22 (Applause.)
- MR. DAVID ALBRIGHT: Thank you for that.
- 24 The next speaker -- it looks like we have two
- 25 speakers remaining. The next speaker is Yolanda Dizon.

- 1 MS. YOLANDA DIZON: Aloha. My name is Yolanda
- Dizon, not Dizon, but that's okay.
- 3 Can I ask you, any of you live on the islands?
- 4 It was asked before, but I -- I didn't hear.
- 5 MR. DAVID ALBRIGHT: No. Well, Chauncey lives
- 6 on the islands.
- 7 MR. CHAUNCEY HEW: Oahu.
- 8 MS. YOLANDA DIZON: You're Oahu? And how long
- 9 have you three been here?
- 10 MR. DAVID ALBRIGHT: You mean this trip?
- MS. YOLANDA DIZON: Yeah, this trip.
- 12 MR. DAVID ALBRIGHT: We got here yesterday.
- 13 MS. YOLANDA DIZON: Oh, yesterday. How long
- 14 are you going to stay?
- 15 MR. DAVID ALBRIGHT: We're leaving tomorrow.
- MS. YOLANDA DIZON: Oh, tomorrow already.
- 17 The only reason why I'm asking this question
- is I would like to invite you to come swim in our
- 19 waters, please. I am not really joking. I mean, I am
- 20 serious. Come swim in our waters.
- 21 UNIDENTIFIED SPEAKER: For how long?
- 22 MS. YOLANDA DIZON: Because this is testimony,
- 23 yeah, for what is happening. All this that you see, you
- see, all this -- (indicating) -- it's from out there.
- 25 So I invite you, come swim in our waters with your

- families, your children, and enjoy it. And I pray you
- don't look like this when you come out.
- 3 Every life in this room, everyone who gave a
- 4 testimony, their lives are priceless. There is no
- 5 compromise for any individual, any living human being
- 6 that lives on our islands, or anywhere in the world. So
- 7 when it comes to the weighing of cost and life, there is
- 8 no -- life is precious.
- 9 So after hearing all the testimonies -- and I
- 10 am so happy to be here tonight, because this is the
- 11 first meeting I've ever been to that everyone in the
- room are all on one side of the fence and all agree.
- 13 (Applause.)
- 14 MS. YOLANDA DIZON: And I love it. Because it
- is about lives, our precious human lives.
- So, please, EPA -- what is that, Environmental
- 17 Protection Agency -- I ask you, please, do your
- 18 fiduciary duties for our lives.
- Mahalo.
- MR. DAVID ALBRIGHT: Thank you for those
- 21 comments. And if I mispronounced that last name, I am
- 22 sure I'm gonna mess up on this one. It's the last
- 23 speaker, Kekai Keahi.
- 24 (Applause.)
- 25 MR. KEKAI KEAHI: Aloha. My name is Kekai

- 1 Keahi. I'm a convicted criminal. And just keep that in
- 2 mind. I going to tell you why.
- I gonna start off with young kid days, yeah,
- 4 when we used to go ocean, always out there, we get hurt,
- 5 we get cut, the old folks used to tell us go (Hawaiian),
- 6 go down to the ocean and go clean your cut, because the
- 7 ocean gonna heal 'em. My mother is one white wahine
- 8 from the mainland, not used to that kine stuff. We went
- 9 to the doctor one time. The doctors told my grandpa and
- 10 my mother, which was -- he was a haole, too -- go down
- 11 to ocean, go clean your cut. That's the truth, yeah.
- 12 Nowadays, I coach (inaudible) with 250
- 13 members. You should see the staph outbreaks we get.
- 14 You wouldn't even believe one -- one guy, two years ago,
- 15 got -- was so bad, he had staph, he had to go in
- 16 surgery. They almost going to take off his arm. That's
- 17 how bad he was.
- 18 And I -- to me, I don't know where this staph
- 19 problem came from, until I start learning about
- 20 injection wells and all that kind of stuff like that.
- 21 This is a -- another -- you know, one of the
- 22 old folks, he used to be the foreman at the golf course
- 23 right here in Kaanapali. If you look at the golf
- 24 course, there's only -- at some places, it's only about
- 25 six feet above sea level, maybe less. He tell me that

- they fertilize their golf courses using 144,000 pounds
- of fertilizer, that they water with two million gallons
- of water, and that thing percolate right back down into
- 4 the ocean. Six feet above sea level.
- 5 One other thing, too, is, me, I born and
- 6 raised in the ocean. I'm a fisherman. I'm not one
- 7 commercial fisherman, but subsistence fisherman. From
- 8 my tutu to my father to me, we always were taught for
- 9 respect the ocean, no take more than you need. If you
- get extra, you go give your friends or your family.
- 11 That's how we live. That's Hawaiian style, yeah.
- 12 Recently, maybe one past couple years, they
- went put one law into place that I cannot use nets at
- 14 nighttime, because we was a problem. Us Hawaiian people
- 15 was a problem, the reason why no more fish in the ocean
- anymore because we overfishing. But that's not how us
- guys was raised. We only take what we need.
- But then, at the same time, I look back at all
- 19 these injection wells, the hotels is right on the beach,
- with the fertilizers. If you go to Kaanapali, they get
- 21 this big lake kind of thing where all the fertilizers
- 22 collect. And they -- they turn on the pumps and they
- 23 pump 'em out into the ocean. I think that's an EPA
- 24 violation. You guys should go check that thing out, you
- 25 know what I mean, for real. Yeah.

- And us guys, we live there, we catch the fish and we eat 'em.
- Going back to the criminal thing. Because
- 4 that's the way I was raised and we go use net, yeah,
- 5 respectfully of the ocean. Because the law did pass
- 6 saying because we was a problem, now me, as one
- 7 Hawaiian, practicing what we did for 2,000 years, has
- 8 become one criminal, yeah. And I give you permission to
- 9 judge me. Am I a criminal for living my -- you know,
- 10 the way our people have lived for 2,000 years? Am I a
- 11 criminal? I mean, you can answer yes on no. Because I
- 12 think I'm not one criminal.
- 13 I think the criminals is the guys who using
- 14 injection wells, all the hotels that pumping the
- 15 fertilizers into the lawns and into the golf courses,
- 16 the Maui Land and Pineapple, Amfac, sugar cane and
- 17 pineapple, who use pesticides beyond, before 100 years,
- they been pumping into the ground. All this problem is
- 19 surfacing right now, yeah.
- And we was the one, us Hawaiians, we was the
- one, who had to better problem because our fault the
- reason why the fish is depleting in these oceans?
- I want to tell you just one thing. Back in
- 24 maybe up to the late sixties, this whole west side was
- 25 plantation camps. In those plantation camps, the

- 1 majority of people was subsistence fishermen. If you
- look nowadays, we no more have those camps. The
- 3 majority of the people now is subsistence Foodland
- 4 buyers. They go Foodland and Safeway. You get -- I can
- 5 tell you we probably get, on this side of the island,
- 6 less than half the amount of fishermen that there was
- 7 before. And we still practice the same way we
- 8 practiced. But, yet, we get less fish.
- 9 And so us Hawaiians was made criminals for
- 10 living the way we lived respectfully, yeah.
- 11 We was in one contested case hearing at one
- 12 time. And a lawyer told me, are you -- are you -- are
- 13 you educated, did you go to college, how do you know
- 14 about the ocean, yeah. I said, I never go college for
- 15 learning about the ocean, anything like that, I just
- 16 know. They say, well, then you no expert on the ocean
- because you don't know, you're not educated. But,
- funny, 'cause I came back, told him, you know what, I
- 19 educated in the ocean, I didn't go to one college and
- get one degree for and say that I'm a doctor or
- 21 anything, but I betcha I more educated than you because
- 22 my education comes from 2,000 years of trial and error
- and observation. So who would know more, a person that
- 24 go to college and study the ocean for five, six, seven
- 25 years, or me, who born and raised in here, where I get

- 1 my (Hawaiian) come back from 2,000 years, yeah.
- So, again, if you looking at me, do you think
- 3 I am one criminal for living how I like live? Because
- 4 we went build a pond for everybody.
- 5 So you know what, no to the injection wells.
- 6 In fact, go beyond that, go tag all the hotels, go tag
- 7 all the golf courses, Maui Land & Pine and Amfac, who
- 8 was the true problem to this place.
- 9 And that's all I got. Different angle on the
- 10 situation.
- 11 (Applause.)
- 12 MR. DAVID ALBRIGHT: Thank you for those
- 13 comments.
- 14 And thank you to everyone for coming out
- 15 tonight, for providing the comments that you did, for
- staying this long. We really do appreciate it.
- I just want to say a bit about the process
- that we're going forward from here with. Obviously, we
- 19 are going to get a transcript of tonight. We've gotten
- a substantial number of comments in the mail, by email,
- turned in tonight, a lot of public comments tonight.
- The EPA will need to process all those comments and
- 23 concerns and start to look at this issue in relation to
- 24 what we've proposed with the injection well permit.
- 25 This is going to take a little while, obviously, for us

- 1 to do that. But as of tonight, there will be -- the
- 2 formal public comment period is closing. And we will
- 3 then undertake this review of the comments and make a
- 4 decision on the permit, whether to issue the permit as
- 5 proposed, whether to modify the permit, whether to deny
- 6 the permit, just what the precise action is that EPA
- 7 will take on the permit based on the comments that have
- 8 been submitted, the day that it has been submitted, and
- 9 the County's application.
- 10 So with that, I just want to thank you -- I
- 11 guess we got a couple questions. Hold on.
- 12 If you have a quick question or two, why don't
- 13 you come to the podium?
- 14 MS. UILANI KAPU: I just wanted to know when
- the draft comment period is closed?
- 16 MR. DAVID ALBRIGHT: The comment period on the
- 17 Draft Permit, we opened that period in August when we
- 18 first issued the proposed permit. It was extended, I
- 19 think it was September 23rd, through tonight, to afford
- 20 people the opportunity to submit written comments and
- 21 then, obviously, to come tonight and submit any comments
- or provide oral testimony. But after tonight, the
- 23 comment period is closed. That doesn't mean that we
- 24 wouldn't consider information that was provided to us,
- 25 but the formal public comment period is closed after

- 1 tonight.
- MR. BILL FRAMPTON: Once the -- the next step,
- 3 the permit will be issued? Once it's issued, is there a
- 4 review of that or an appeal process we're looking at?
- 5 MR. DAVID ALBRIGHT: I can't say that the
- 6 permit will be issued. I can say that the agency needs
- 7 to take into consideration the comments that have been
- 8 submitted and make a final decision. That decision
- 9 could be to issue the permit. It could be to deny the
- 10 permit. It could be to issue a permit that's different
- 11 from the proposed permit.
- MR. BILL FRAMPTON: Okay. Thank you.
- MR. DAVID ALBRIGHT: If EPA or -- in a
- 14 situation where EPA issues a UIC permit -- this isn't
- 15 just for the Lahaina permit, but for any permit -- there
- is a 30-day period of time after issuance of a permit
- where anyone who has commented upon the permit,
- including providing comments at a public hearing such as
- 19 this, can appeal to the Environmental Appeals Board, if
- they feel that is appropriate.
- Okay. Again, thank you very much. And that
- 22 closes the public hearing.
- 23 (Applause.)
- 24 (Public Hearing adjourned at 8:55 p.m.)

25

1	CERTIFICATE
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3	
4	
5	
6	
7	I, TONYA MCDADE, a Court Reporter of the State
8	of Hawaii, do hereby certify that the proceedings
9	contained herein were taken by me in machine shorthand
10	and thereafter was reduced to print by means of
11	computer-aided transcription; that the foregoing
12	represents, to the best of my ability, a true and
13	accurate transcript of the proceedings had in the
14	foregoing matter.
15	I further certify that I am not an attorney
16	for any of the parties hereto, nor in any way concerned
17	with the cause.
18	
19	DATED this day of, 2008.
20	
21	
22	
	Tonya McDade, RPR, CRR, CBC
23	Certified Shorthand Reporter #447
	Registered Professional Reporter
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